THE GREAT DISMAL ATLAS

DRIVING THE DISMAL SWAMP RING ROAD:

EXPLORING THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE

CRUISING THE NORFOLK CIRCLE:

BOATING ON THE DISMAL SWAMP & ALBEMARLE & CHESAPEAKE CANALS

Prepared for the Virginia Canals and Navigations Society by W.E. Trout, III
First Edition, 1998
With a cover color reminiscent of the swamp's amber waters.
This supersedes and includes the 18-page DISMAL SWAMP CANAL ATLAS published by
the canal society for its 1993 annual meeting on the Dismal Swamp Canal.

Publication of THE GREAT DISMAL ATLAS has been made possible by

Robert C. King, Sr., President, Richmond Ford
Wild River Outfitters, (757) 431-8566; FAX (757) 340-1098

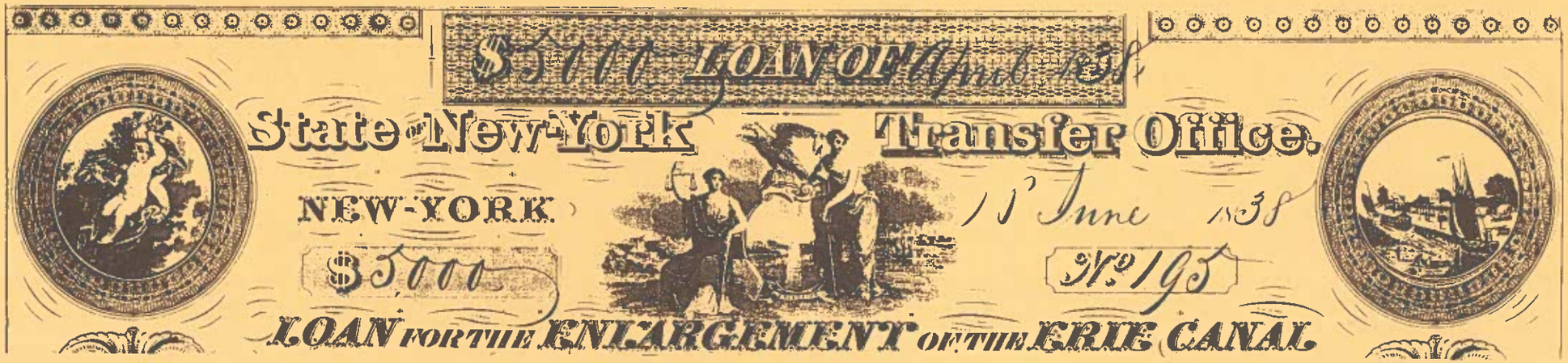
3636 Virginia Beach Blvd. #108A
Virginia Beach, VA 23452

In Memory of

ALEXANDER CROSBY BROWN
CHARLES B. CROSS, JR.
ALVAH DUKE

and others who loved the Great Dismal Swamp.

Copies of this and other VC&NS river atlases are available from
Richard A. Davis, VC&NS Sales, Rt.2, Box 254, Lexington, VA 24450, (540) 463-6777;
Wild River Outfitters, mail@wildriveroutfitters.com; www.wildriveroutfitters.com;
and other outlets in southeast Virginia and northeast North Carolina.



FRONT COVER, THE DISMAL SWAMP CANAL ON PAPER MONEY: "The Lake Drummond Hotel," the famous 1831 etching of the stern-wheeler LADY OF THE LAKE steaming north up the Dismal Swamp Canal. On the right is the infamous Lake Drummond Hotel on the state line, half in Virginia and half in North Carolina, "calculated to render facilities for matrimonial and duelistic engagements." Between the canal and the hotel was the towpath, also used as a turnpike. The original 1831 etching by Thomas Williamson became famous when it was miniaturized to a vignette just over an inch across, and used on paper money and bonds.

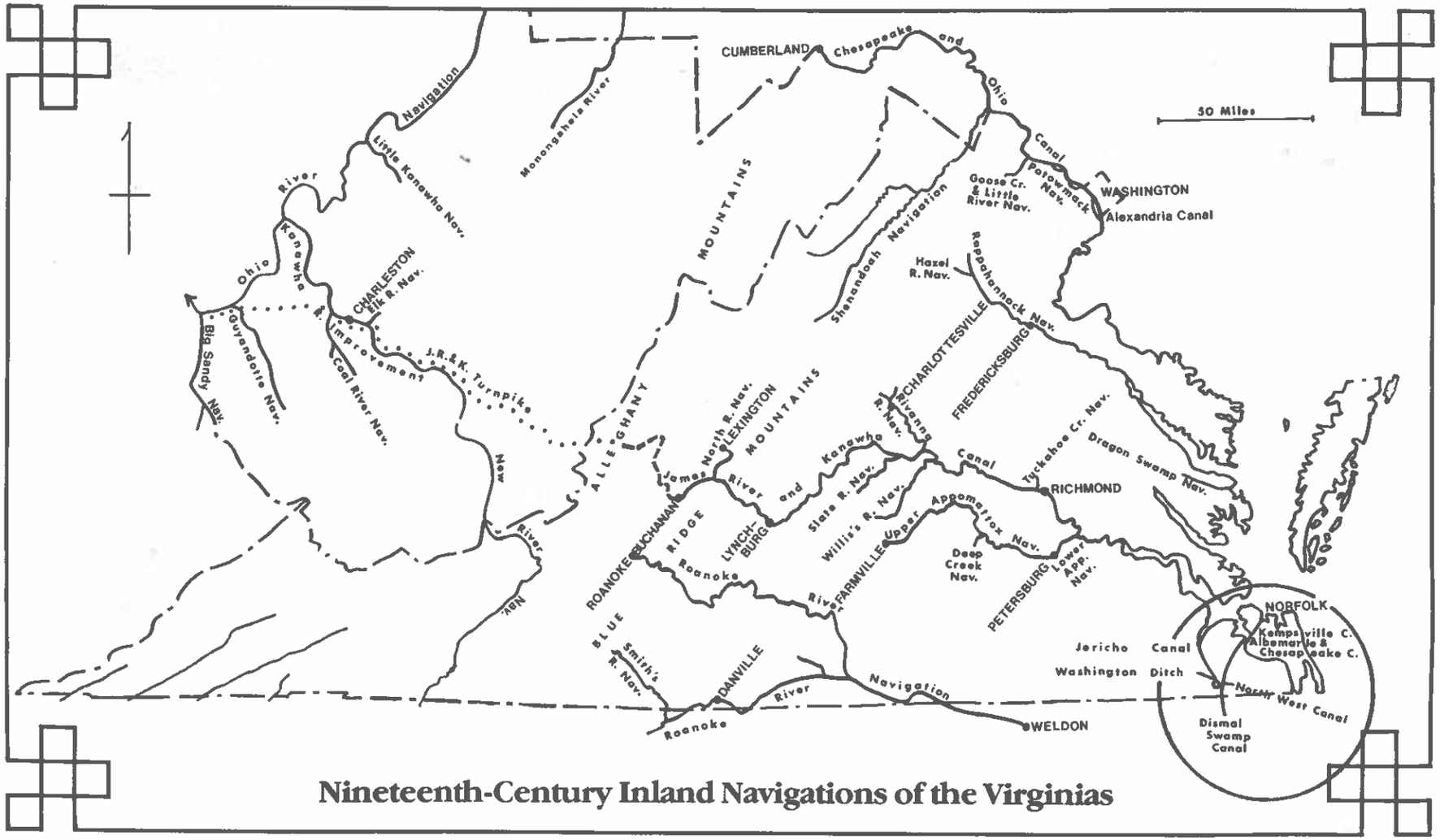
See "The Dismal Swamp Canal and Lake Drummond Hotel on Paper Money, 1838-1865," by John. A. Muscalus, Historical Paper Money Research Institute, Bridgeport PA, 1965; and "A Chance for $50,000 - the Dismal Swamp Canal Lotteries," by Alexander C. Brown, THE VIRGINIA NUMISMATIST, July 4, 1976.

The cover drawing was enlarged six times from the vignette above on this 1838 bond issued for the enlargement of the Erie Canal; the top part of the bond is shown full size. The computer-generated enlargement on the cover was prepared for the Winter 1992 TILLER by Rich Guild, with corner artwork by Patty Myrick of Myrick Framery & Gallery.

ISBN 1-888838-00-0

THE GREAT DISMAL ATLAS

A VIRGINIA CANALS & NAVIGATIONS SOCIETY RIVER ATLAS PROJECT



Nineteenth-Century Inland Navigations of the Virginias

Copyright 1998 by the Virginia Canals and Navigations Society

2 STRIP MAPS IN THE GREAT DISMAL ATLAS

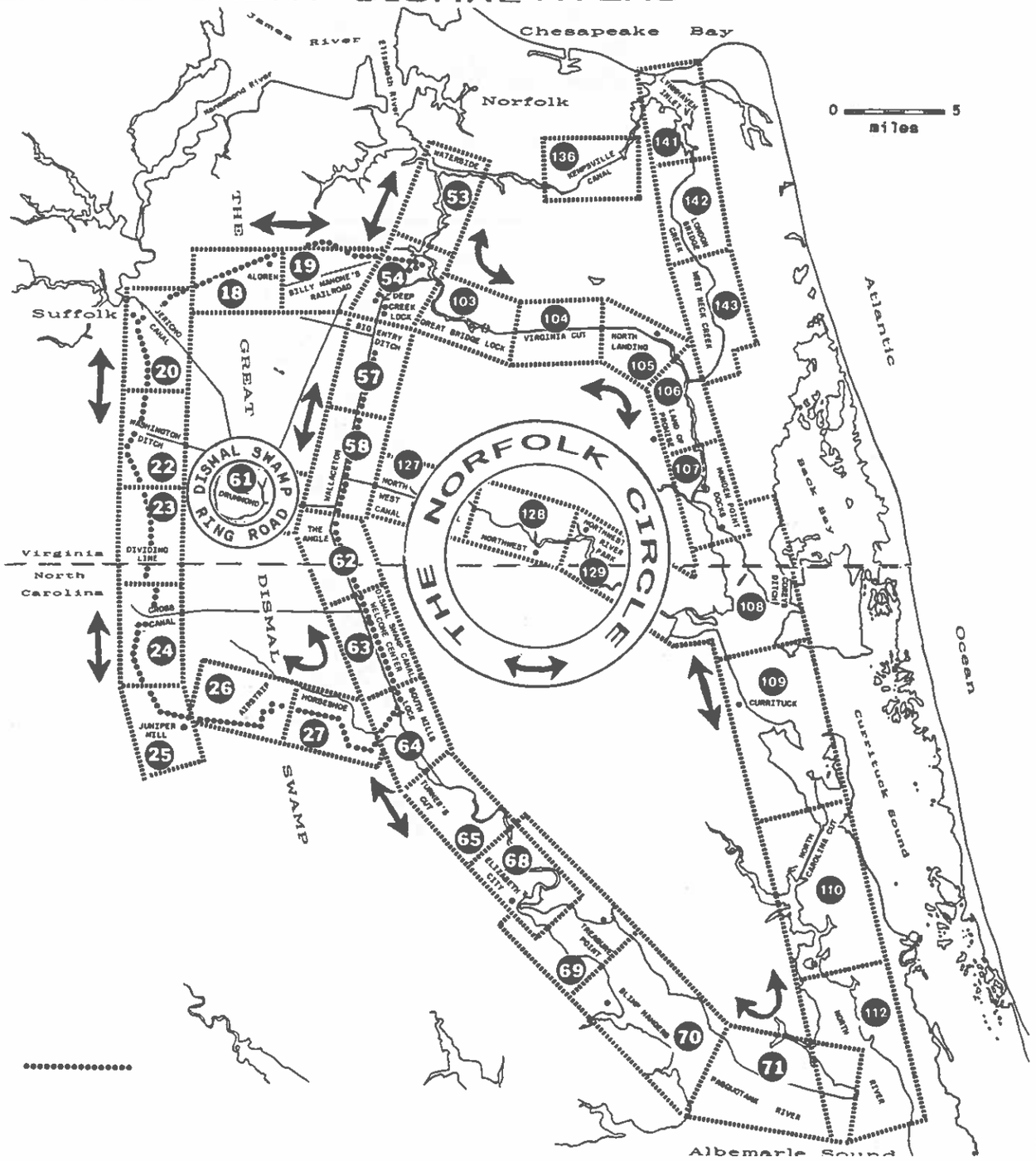


TABLE OF CONTENTS

THE DETAILED STRIP MAPS ARE SHOWN IN BOLD CAPITALS

INTRODUCTION

4-5. "Oh Beautiful, for Spacious Skies and Amber Waves": Juniper Waterways in the Great Dismal
6-7. Useful Information
8-9. Index to the Maps: Virginia
10-11. Index to the Maps: North Carolina
12-13. THE GREAT DISMAL ATLAS BOARD GAME

PART 1: DRIVING THE DISMAL SWAMP RING ROAD

14-15. Honoring Union Camp Corporation
16-17. Driving the Dismal Swamp Ring Road
18-19. **ALGREN** **BILLY MAHONE'S RAILROAD**
20-21. **JERICHO CANAL** Jericho & Suffolk
22-23. **WASHINGTON DITCH** **DIVIDING LINE**
24-25. **CROSS CANAL** **JUNIPER MILL**
26-27. **AIRSTRIP** **HORSESHOE**
28-31. The Great Dismal Swamp National Wildlife Refuge
32. Ditches in the Great Dismal
33-34. The Washington and Jericho Ditches
35-36. Gondola voyages to the lake
37-38. BUILD YOUR OWN DISMAL SWAMP GONDOLA
39-41. "The Cross Canal: Gates County's Water Route to Norfolk"
42-43. Logging in the Great Dismal
44-46. Railroads in the swamp
47. Moses White's Gas Locomotive

PART 2: DRIVING AND CRUISING THE DISMAL SWAMP CANAL

48-49. In memory of the Immortal Dismalites
50. Driving The Dismal Swamp Ring Road: The DSC
51-52. Cruising the Norfolk Circle: The DSC
53-54. **WATERSIDE** **DEEP CREEK LOCK**
55. Deep Creek Locks Park: Showcase of Canal History
56-57. Deep Creek Lock **BIG ENTRY DITCH**
58-59. **WALLACETON** The Wallaceton Oasis: A Proposal
60-61. Scenes on Lake Drummond **LAKE DRUMMOND**
62-63. **THE ANGLE** **DISMAL SWAMP CANAL WELCOME CENTER**
64-65. **SOUTH MILLS LOCK** **TURNER'S CUT**
66. South Mills: the Lock and the Battle
67. Elizabeth City and her Blimps
68-69. **ELIZABETH CITY** **TREASURE POINT**
70-71. **THE BLIMP HANGER** **MOUTH OF PASQUOTANK RIVER**
72-87. "The Dismal Swamp Canal: to render this the most favoured Country in the Universe"
76. The Dismal Swamp Canal Welcome Center
77. Culpepper Lock, 1820's - 1890's
80-81. The Feeder Ditch Lock
82-85. Plan and profile of the canal in 1896
88-95. "The Gilmerton Cut: A Monument to Governor Thomas Walker Gilmer and the Builders of the Dismal Swamp Canal"

PART 3: CRUISING THE ALBEMARLE & CHESAPEAKE CANAL

96-97. In Memory of Alexander C. Brown 1905 - 1993
98-99. Cruising the Norfolk Circle: The A&C
100. The Original Great Bridge Lock
101. How Great Bridge Lock Works
102-103. Great Bridge **GREAT BRIDGE LOCK**
104-105. **THE VIRGINIA CUT** **NORTH LANDING**
106-107. **LAND OF PROMISE** **MUNDEN POINT DOCKS**
108-109. **COREY'S DITCH** **CURRITUCK**
110-111. **THE NORTH CAROLINA CUT** Coinjock
112. **MOUTH OF NORTH RIVER**
113. A Gourmet Cruise on the A&C
114-116. "The Albemarle and Chesapeake Canal: the Waterway Dredged by Iron Titans"
117. The A&C Canal in 1900

PART 4: CANOEING AND EXPLORING THE GREAT DISMAL'S OTHER SCENIC WATERWAYS

118. In Memory of the Kempsville Canal 1858-1988

REGIONAL SCENIC WATERWAYS

119. Map Index to the Regional Scenic Waterways
120-121. Chesapeake Waterways Map
122-123. Virginia Beach Waterways Map
124-125. Albemarle Region Waterways Map

THE NORTH WEST RIVER AND ITS CANAL

126-127. Tazewell Lock **THE NORTH WEST CANAL**
128-129. **NORTHWEST** **NORTHWEST RIVER PARK**
130-131. "The North West Canal: The Dismal Swamp's Gateway to the Sea"
132-133. The North West Canal Locks
134-135. The Pickle Barrel Boat

THE KEMPSVILLE CANAL

136. **THE KEMPSVILLE CANAL**
137-139. "The Kempsville Canal: A Canal Construction Time Capsule"

THE VIRGINIA BEACH SCENIC WATERWAY

140. More Historic Canals in Virginia Beach
141. **LYNNHAVEN INLET**
142-143. **LONDON BRIDGE CREEK** **WEST NECK CREEK**

APPENDIX

144-145. Guides to the topo maps and cruising charts
146. The Future of the Dismal Swamp Canal
147. SOURCES CITED IN THE TEXT
148-149. Index
150-151. Great Dismal Swamp Coalition VC&NS Publications

4 "OH BEAUTIFUL, FOR SPACIOUS SKIES, AND AMBER WAVES":

The Great Dismal's beautiful amber water is natural "sun tea" steeped from leaves, with a natural root beer foam. One of the swamp's historic canals, the ill-fated **PORTSMOUTH DITCH**, was built in the 1890s (but never used) expressly to carry this much-desired Juniper water from Lake Drummond to Portsmouth.

Thanks to Union Camp Corporation and other donors a great deal of the Great Dismal is now **THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE** with headquarters on the west side of the swamp near the Washington Ditch.

THE GILMERTON CUT was dug in 1843 to extend the Dismal Swamp Canal to the north, bypassing winding Deep Creek. The 4¼-mile cut was abandoned in 1899 but its two stone locks still survive, the only stone locks now left in the swamp.

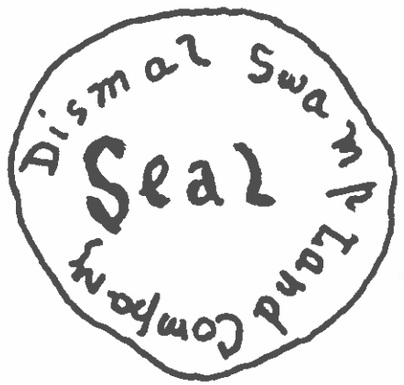
THE JERICHO CANAL (or Ditch), 9 miles long, was a direct water route from Lake Drummond to Suffolk, built in 1810 by the Dismal Swamp Land Company. It was handy for carrying shingles to the Suffolk docks, and tourists to the lake on square-ended "gondolas" up to 8' wide and 60' long, towed by men.

THE WASHINGTON DITCH, 5 miles long, was one of the first ditches dug to float timber and shingles out of the swamp. It was built in the 1760s by the "Adventurers for Draining the Great Dismal Swamp" (the Dismal Swamp Land Company) with which George Washington was connected. The canal may be the first geographical site named after Washington - the first "Washington Monument."

THE FEEDER DITCH, 3½ miles long, was built in 1812 from "Drummond's Pond" to the Dismal Swamp Canal, to supply water for the locks. Today it is the only boatable canal to Lake Drummond.

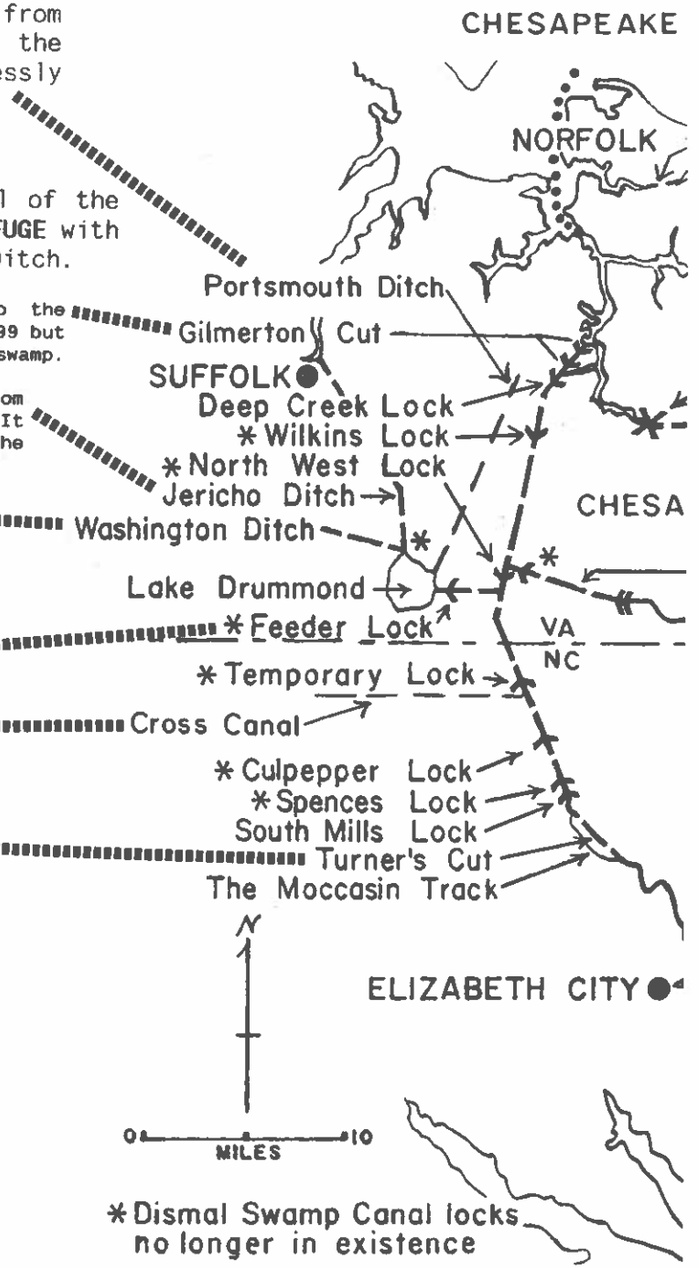
THE CROSS CANAL, also known as the HAMBURG DITCH and the WHITE OAK MARSH CANAL, was completed in 1822. It ran for 11 miles across the Dismal Swamp, allowing boats from Gates County, North Carolina, to reach the Dismal Swamp Canal and Norfolk.

TURNER'S CUT, 3½ miles long, was completed in 1860 to extend the Dismal Swamp Canal to the south, bypassing a narrow part of the Pasquotank River called the "Moccasin Track." It is still in use as part of the Intracoastal Waterway.

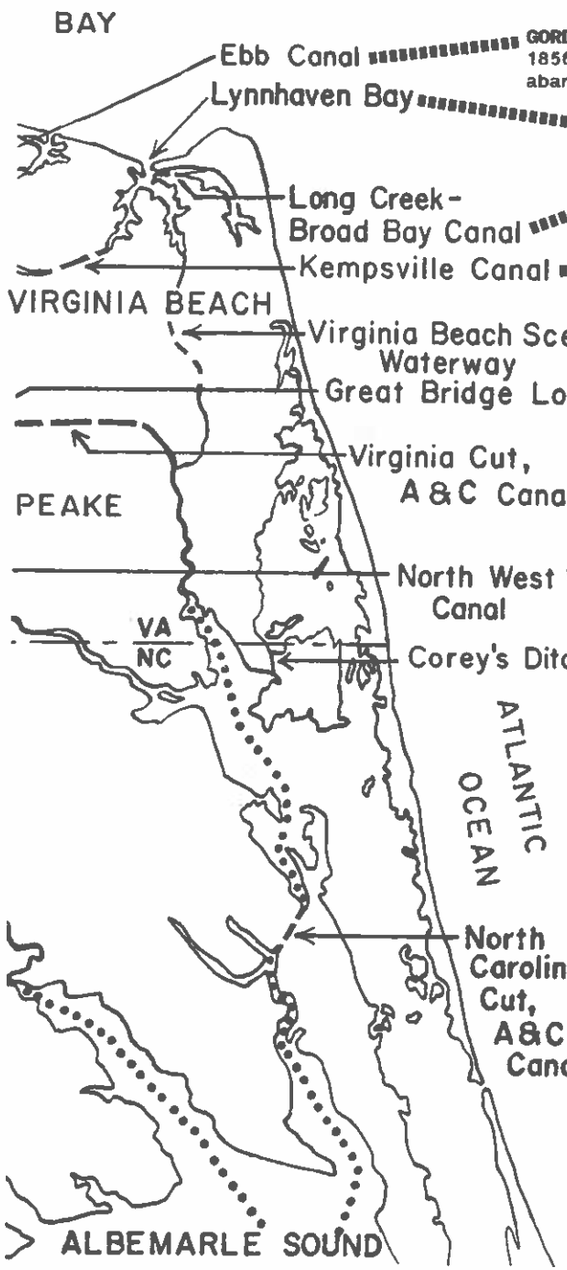


Hand-drawn seal of the Dismal Swamp Land Company, from the May 12, 1871 lease of the company's swamp lands to Francis R. Baird et al.

(Duke University collection)



THE DISMAL SWAMP CANAL is the swamp's most famous waterway, begun in 1793, first opened in 1805, and still very much in use. The 22-mile canal opened up the Albemarle Sound region and the Roanoke River valley to the Norfolk markets and the sea. The Dismal Swamp Canal is today the oldest surviving waterway in continuous use in the United States. It now has two locks, at Deep Creek and South Mills, dating from 1941. It also has its own **DISMAL SWAMP CANAL WELCOME CENTER** on Rt.17 below the state line.



GORDON'S CANAL, or the NORFOLK AND PRINCESS ANNE CANAL was begun in 1856 to link the Elizabeth River with Little Creek, but it was abandoned unfinished. It is shown on modern maps as the EBB CANAL.

LYNNHAVEN BAY was created by a canal cut to Chesapeake Bay in Colonial times. The sluggish Lynnhaven River was opened up by tidal action.

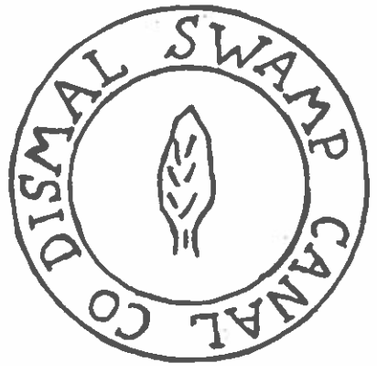
THE LONG CREEK-BROAD BAY CANAL, 3/4 miles long, was dug in 1949 to create a navigable link from Lynnhaven Bay to Broad Bay and Virginia Beach.

THE KEMPSVILLE CANAL was promoted by Thomas Jefferson as a military canal for gunboats, connecting Lynnhaven Bay with the Elizabeth River. It was begun in the 1840s but was abandoned unfinished after the Civil War. Until 1988 its remains clearly showed trenching, spoil piles and other clues to 19th-century canal construction methods.

THE LONDON BRIDGE CREEK - WEST NECK CREEK CANAL was probably first dug in the 1930s for flood control, and opened up again during World War II to let small craft operate undetected during an invasion. It is now a canoe trail, the VIRGINIA BEACH SCENIC WATERWAY.

THE NORTH WEST CANAL, 7 miles long, was completed in 1830 to connect the Dismal Swamp Canal with North West River and the coastal sounds. It was abandoned in the 1860s but its three wooden locks are still partially preserved underground, the only wooden locks left in the Great Dismal.

COREY'S DITCH was excavated in 1920 to reestablish water flow between Back Bay and Currituck Sound, after a road causeway blocked the connection.



Wax seal of the Dismal Swamp Canal Company, from the 1849 Annual Report to the Virginia Board of Public Works.

(Library of Virginia archives)

THE ALBEMARLE & CHESAPEAKE CANAL, or the A&C for short, is still very much in use as part of the Atlantic Intracoastal Waterway. It was one of the world's first modern sea-level canals when it was completed in 1859 as the great rival to the Dismal Swamp Canal. It has two major cuts, the VIRGINIA CUT at Great Bridge (with the A&C's only lock), and the NORTH CAROLINA CUT at Coinjock. Inbetween the cuts a navigable channel was dredged along shallow rivers and across coastal sounds.

6 USEFUL INFORMATION

THE DISMAL SWAMP CANAL ATLAS is the 11th in a series of Virginia river atlases published by the Virginia Canals & Navigations Society. The object is to bring back to light a lost era in Virginia's history when her rivers and streams were a great network of public works to promote commerce and trade. These waterways, now forgotten, were the superhighways of the time. We're trying to rediscover what's out there.

This atlas is the result of many years of research and field work, but it is not the final word on the subject. We hope that the maps and text can serve as a framework for future research and discoveries. The reader is invited to add what he knows and to pursue some of the many mysteries which remain unsolved. There is still plenty of work to be done!

AREA CODES:

Telephone numbers are area code 757 (formerly 804) in Virginia and 919 in North Carolina, unless otherwise indicated. NOTE: Addreses and phone numbers are subject to change!

CRUISES, TOURS AND CANOE RENTALS

CANAL CRUISING: see the Nautical Charts section.
CHESAPEAKE CAMPGROUND, on the Dismal Swamp Canal south of Deep Creek, rents canoes which can be used on the canal and to Lake Drummond (See Camping).
CHESAPEAKE MUNICIPAL AIRPORT, 1-800-600-9990 or 421-9000, on West Road south of Deep Creek, offers 45 minute air tours of the swamp or tidewater area.
DISMAL SWAMP CANAL CRUISES through both locks on the CARRIE B were inaugurated in 1993 by Travel Designers, Inc., 119 High Street, Portsmouth VA 23704. Reservations required at 393-4735 or 1-800-642-8991.
DISMAL SWAMP TOURS OF WALLACETON, P.O. Box 6038, Chesapeake, VA 23323. Guided tours to Lake Drummond. Reservations/brochure: 757-421-0729.
HAMPTON ROADS AIRPORT, 488-1687, between Suffolk and Portsmouth on US 460, offers air tours of the swamp.
NORFOLK HARBOR TOURS (see WATERSIDE map)
NORTHWEST RIVER PARK organizes excursions (See Camping)
OUTDOOR EXPERIENCE, P.O. Box 5755, Virginia Beach, VA 23455, 464-5794, offers kayak ecotours of West Neck Creek and the Dismal Swamp.
TIDEWATER ADVENTURES, 110 West Randall Ave., Norfolk, VA 23503, 480-1999, offers an all-day Kayak ecotour to Lake Drummond, and trips to Broad and Back Bays.
WILD RIVER OUTFITTERS, 3636 Virginia Beach Blvd., Suite 108A, Virginia Beach, VA 23452, 431-8566, offers kayak ecotours of West Neck Creek and the Dismal Swamp.

CANOEING GUIDEBOOKS:

CLASSIC VIRGINIA RIVERS by Ed Grove, Howling Wolf Pubs., 1992. Covers Lake Drummond, Dismal Swamp Canal, Merchant's Millpond, Northwest River, and West Neck Creek.
VIRGINIA WHITEWATER by Roger Corbett, Seneca Press, 1988. Covers Dismal Swamp and Virginia Beach Waterways.
A PADDLER'S GUIDE TO EASTERN NORTH CAROLINA, by Bob Benner and Tom McCloud, Menasa Ridge, 1987.

These books should be consulted for details of importance to canoeists. See also the NAUTICAL CHARTS section.

Be advised that of the ditches radiating out from Lake Drummond, only the Feeder Ditch is guaranteed to be clear of obstructions. The others, including the Washington and Jericho ditches, may be quite impassable. It would be exciting to open at least one ditch for canoeing, and for guided nature tours in a replica of a Dismal Swamp "gondola."

THE NORTH LANDING SCENIC RIVER SYSTEM:

This part of the state's scenic river system, designated in 1988, includes 13.8 miles of the NORTH LANDING RIVER from North Landing down to the North Carolina line, and its branches WEST NECK CREEK, the POCATY RIVER, and BLACKWATER CREEK. Detailed strip maps are in this atlas.

A useful historical study of the area, "The North Landing River Basin of Virginia Beach: A Brief Historical Overview," was prepared as Appendix A of the North Landing Scenic River System Report for the Virginia Division of Parks and Recreation by Jeffrey M. O'Dell in 1988.

The North Landing Scenic River System is overseen by an advisory board. Your input would be welcome, to the Chairman, Joseph T. Bresica, 487-1766, or to Richard Gibbons of the Virginia Department of Conservation and Recreation, 203 Governor Street, Richmond VA 23219-2010, (804) 786-4132.

HIKING TRAILS:

Most of the Dismal Swamp ditches have roads beside them. Hikers and bicyclers should call the Dismal Swamp National Wildlife Refuge, 986-3705, to determine which trails are now passable. The Tidewater Appalachian Trail Club (P.O. Box 8246, Norfolk, VA 23503) is working on enlarging the swamp's passable trail system and has a TIDEWATER TRAIL GUIDE, available from Wild River Outfitters.

More details on the Washington Ditch Trail, Jericho Ditch Lane, the RR Ditch Trail and the Boardwalk Trail (at the Washington Ditch) are in the Sierra Club's HIKING THE OLD DOMINION by Allen de Hart.

BICYCLE TRAILS:

NORTH CAROLINA BICYCLING PROGRAM, NC DOT, Box 25201, Raleigh, NC 27611, 919-733-2804. Includes a trail up to the VA line on the east side of the Dismal Swamp, and at the A&C. Virginia should continue these routes into the state, and add a new historic cycling trail along the Dismal Swamp Canal.

CAMPING IN THE SWAMP REGION:
(See atlas pages and Delorme Atlas for locations)

BELL'S ISLAND CAMPGROUND, HC 1, Box 139, Currituck NC 27929, on the A&C Canal near Currituck, 919-232-2590.
CHESAPEAKE CAMPGROUND, 693 S. George Washington Highway, Chesapeake, VA 23323, 757-485-0149. Beside the Dismal Swamp Canal, 2 miles south of Deep Creek. Trailer and tent camping, canalbank fishing, bicycle and canoe rental; Dismal Swamp Information Corner.
HAMPTON LODGE FAMILY CAMPGROUND, Coinjock, NC 27923, 919-453-2732. Convenient to the A&C Canal's NC Cut.
LAKE DRUMMOND CAMPGROUND at the Feeder Ditch Spillway, accessible only by boat. Reservations required from the Great Dismal Swamp Wildlife Refuge.
MERCHANT'S MILLPOND STATE PARK, Rt.1, Box 141A, Gatesville, NC 27938, 919-357-1191. Camping, canoeing, canoe camping. Located on the proposed canal along Bennett's Creek from the DSC to the Roanoke River.
MUNDEN POINT PARK has a boat ramp but no camping.
NORTHWEST RIVER PARK. Camping April-November, canoe rental, nature trails, 1733 Indian Creek Rd., Chesapeake, VA 23322, 757-421-1345/7151. Has its own canal system.

CORPS OF ENGINEERS DISTRICT ADDRESSES:

NORFOLK DISTRICT, Corps of Engineers, 803 Front Street, Norfolk, VA 23510, 441-7606.
WILMINGTON DISTRICT, Corps of Engineers, P.O. Box 1890, Wilmington, NC 28401.

HISTORICAL SOCIETIES AND MUSEUMS (selected list):

(For more details on museums see Robert H. Smith's THE NAVAL INSTITUTE GUIDE TO MARITIME MUSEUMS OF NORTH AMERICA WITH SELECTED LIGHTHOUSE, CANAL AND CANAL LOCK MUSEUMS, Naval Institute Press, Annapolis MD, 1990.)

CHESAPEAKE:
NORFOLK COUNTY HISTORICAL SOCIETY OF CHESAPEAKE, 298 Cedar Road, Chesapeake, VA 23320, 382-6591. Publisher of THE DISMAL SWAMP CANAL, GLENCOE DIARY & JUNIPER WATERWAY.

NEWPORT NEWS:
THE MARINERS MUSEUM, 100 Museum Drive, Newport News, VA 23606, 596-2222. S on Rt.17 from I-64. Internationally-known marine museum, with a library useful for Dismal Swamp Canal research. Publishes the MARINERS MUSEUM JOURNAL.
U.S. ARMY TRANSPORTATION MUSEUM, Bldg. 300, Fort Eustis, Newport News, VA 23604, 878-1182. Large collection of US Army vehicles.
THE VIRGINIA LIVING MUSEUM, 524 J. Clyde Morris Blvd., 595-1900 has (in 1987) a 60-foot representation of the James River from source to sea.

NORFOLK:
LITTLE CREEK AMPHIBIOUS BASE MUSEUM is open weekends 10-3; 464-7761. Off Shore Drive on Western Annex in Norfolk.
MacARTHUR MEMORIAL LIBRARY AND ARCHIVES, 198 Bank St., Norfolk, VA 23510, 441-2256. Good local history material.
NAUTICUS, THE NATIONAL MARITIME CENTER, One Waterside Drive, 664-100. At Norfolk's WATERSIDE. Upstairs is the HAMPTON ROADS NAVAL MUSEUM, 444-8971.

PORTSMOUTH:
PORTSMOUTH HISTORICAL ASSOCIATION, 221 North St., Portsmouth, VA 23704, 393-0241.
PORTSMOUTH LIGHTSHIP MUSEUM, London slip at Water Street, P.O. Box 248, Portsmouth, VA 23705, 393-8741. Open Tues.-Sat. 10-5, Sun. 1-5 year round except Thanksgiving, Christmas and New Year's days. No fee.

PORTSMOUTH NAVAL SHIPYARD MUSEUM, 2 High St. (P.O. Box 248, Portsmouth, VA 23705), 393-8741. One block from the Lightship, at the foot of High Street. Same hours as the Lightship.

SOUTHHAMPTON:

SOUTHHAMPTON AGRICULTURE AND FORESTRY MUSEUM, 26315 Heritage Lane, Courtland, VA 23837, 757-562-3277. Exhibits include a gasoline-powered Dismal Swamp logging locomotive and skidder.

SUFFOLK:

SUFFOLK-NANSEMOND HISTORICAL SOCIETY, in RIDDICK'S FOLLY MUSEUM, 501 N. Main St., Suffolk, VA 23439, 934-1390.

SUFFOLK MUSEUM, 118 Bosley St., Suffolk, VA 23439, 925-6311.

VIRGINIA BEACH:

CAPE HENRY LIGHTHOUSE, N of Va. Beach on Rt.60, 460-1688.

MARITIME HISTORICAL MUSEUM, 25th Street and Atlantic Avenue, Virginia Beach, VA 23451, 491-8608. Near the LIFE-SAVING MUSEUM OF VIRGINIA at 24th Street, 422-1587.

OLD AND NEW LIGHTHOUSES at Fort Story, the oldest being the first lighthouse erected by the United States, 1791-92. 422-7305. Get a visitors' pass at Fort Story.

PRINCESS ANNE COUNTY - VIRGINIA BEACH HISTORICAL SOCIETY, 2040 Potters Road, Virginia Beach, VA 23454.

NORTH CAROLINA:

CAMDEN COUNTY HISTORICAL SOCIETY, Camden, NC 27921, 919-336-2747.

CURRITUCK COUNTY HISTORICAL SOCIETY, Jarvisburg, NC 27947.

CURRITUCK COUNTY PUBLIC LIBRARY, Star Route, Box 826, Barco, NC 37917, 919-453-8345. County archives.

GATES COUNTY HISTORICAL SOCIETY, Elizabeth Seiling, Box 98, Gates, NC 27937, 919-357-1733.

GATES COUNTY LIBRARY, P.O. Box 27, Court Street, Gatesville, NC 27938, 919-357-0110. County archives.

MUSEUM OF THE ALBEMARLE, Box 795, Elizabeth City, NC 27909, 919-335-1453. Closed Mondays. Includes canal material.

NORTH CAROLINA MARITIME MUSEUM, 315 Front St., Beaufort, NC 28516, 919-728-7317.

PASQUOTANK HISTORICAL AND GENEALOGICAL SOCIETY, P.O. Box 523, Elizabeth City, NC 27909, 919-335-2041.

REFUGES AND WELCOME CENTERS

GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE, P.O. Box 349, Suffolk, VA 23439-0349, 757-986-3705. At the center of THE GREAT DISMAL ATLAS. Refuge office open M-F 8 to 3:30. Refuge open daily from ½ hour before sunrise to ½ hour after sunset.

The grass-roots support group for the refuge is the GREAT DISMAL SWAMP COALITION, Suite #30, 4107 Portsmouth Blvd. #101, Chesapeake, VA 23321. Your participation would be appreciated.

DISMAL SWAMP CANAL WELCOME CENTER, 2356 N. Hwy 17, South Mills, NC 27976, 919-771-8333. Open 9-5 Tues.-Sat. (subject to change), closed Thanksgiving and Christmas Day. A unique center serving visitors from both the canal and the highway, it opened in 1989 when the canal was placed on the National Register and made a National Historic Civil Engineering Landmark. A Dismal Swamp gas locomotive is on display. Moor your yacht or car here and stop for a picnic. Brochures available include the Corps' "Cruising into History," the Center's "Dismal Swamp Canal," and a NC Boating Guide.

MACKAY ISLAND NATIONAL WILDLIFE REFUGE, Box 39, S.R.615, Knotts Island, NC 27950-0039, 919-429-3100. Has 20 miles of canal including "Corey's Ditch."

THE NATIONAL REGISTER OF HISTORIC PLACES:

Thanks largely to the persistence of Karl Kuhlmann, Outdoor Recreation Planner for the Corps of Engineers, the Dismal Swamp Canal from Deep Creek to South Mills, including the locks and the Feeder Ditch was placed on the National Register of Historic Places in 1989. It was also declared a National Civil Engineering Landmark by the American Society of Civil Engineers. The register nomination included only the Corps property, but it was made so that the other parts of the canal, notably the Gilmerton Cut, the Northwest Canal, Turner's Cut and the Moccasin Tract, could someday be added to it by interested parties.

OFFICIAL HISTORIC SITE NUMBERS such as 44CS22 and 131-36 are given for selected historic sites in Virginia which have been reported to the Virginia Department of Historic Resources, 2801 Kensington Ave., Richmond, VA 23221. The code for Virginia is 44, and the relevant county/city codes are 133 or SK for Suffolk, 122 or NR for Norfolk, 131 or CS for Chesapeake, and 134 or VB for Virginia Beach. The Virginia Department of Historic Resources now has a convenient regional office in the Knights of Pythias Castle at 612 Court Street, Portsmouth, VA 23704, 396-6709. They would appreciate your input.

Sites in North Carolina should be reported to the North Carolina Division of Archives and History, 109 E. Jones St., Raleigh, NC 27601, 919-733-7862. The code for North Carolina is 31; the county codes are GA (Gates), CM (Camden), PK (Pasquotank) and CK (Currituck).

Use these numbers to refer to specific sites when supplying more information or reporting site problems. Readers are encouraged to fill out site forms (available from the state agency) for unrecorded sites, including confidential ones, so they will not go unnoticed by historians and cannot be ignored by developers.

ESPECIALLY RECOMMENDED FOR FURTHER READING

THE DISMAL SWAMP CANAL, by Alexander Crosby Brown, Norfolk County Historical Society of Chesapeake, 1970. The classic reference book on the DSC, now out-of-print.

JUNIPER WATERWAY, A HISTORY OF THE ALBEMARLE AND CHESAPEAKE CANAL, by Alexander Crosby Brown, University Press of Virginia for the Mariners' Museum and the Norfolk County Historical Society of Chesapeake, 1981. The classic reference book on the A&C, now out-of-print.

THE GREAT DISMAL: A CAROLINIAN'S SWAMP MEMOIR, by Bland Simpson, Univ. of North Carolina Press, 1990. An excellent general book on natural and unnatural history.

THE GREAT DISMAL SWAMP, Edited by Paul W. Kirk, Jr., published for the Old Dominion University Research Foundation by the University Press of Virginia, 1979. A basic compendium of historical and scientific information.

THE GREAT DISMAL SWAMP, ITS HISTORY, FOLKLORE AND SCIENCE, by Hubert J. Davis, Cavalier Press, 1962; reprinted in 1971 by the Johnson Pub. Co., Murfreesboro, NC 27855. Great reference for folklore. Also by Davis, same source, MYTHS AND LEGENDS OF GREAT DISMAL SWAMP, 1981.

THE LAKE OF THE GREAT DISMAL, by Charles F. Stansbury, Albert and Charles Boni, NY, 1925.

HOW TO USE THIS GUIDE

Use the index maps on the next four pages to determine which map page you need. These strip maps are arranged in order going south: Part 1, down the west side of the swamp; Part 2, down the Dismal Swamp Canal; Part 3, down the Albemarle & Chesapeake Canal and Part 4 down the North West River and the Virginia Beach Scenic Waterway. With rare exceptions there are no overlaps; each part of the region is shown only once. The strip maps are parts of USGS 7-1/2' topo maps, and NOAA Small Craft map 12206-SC, reproduced actual size so they can be easily used with original maps. You may find it useful to color in the course of the the rivers.

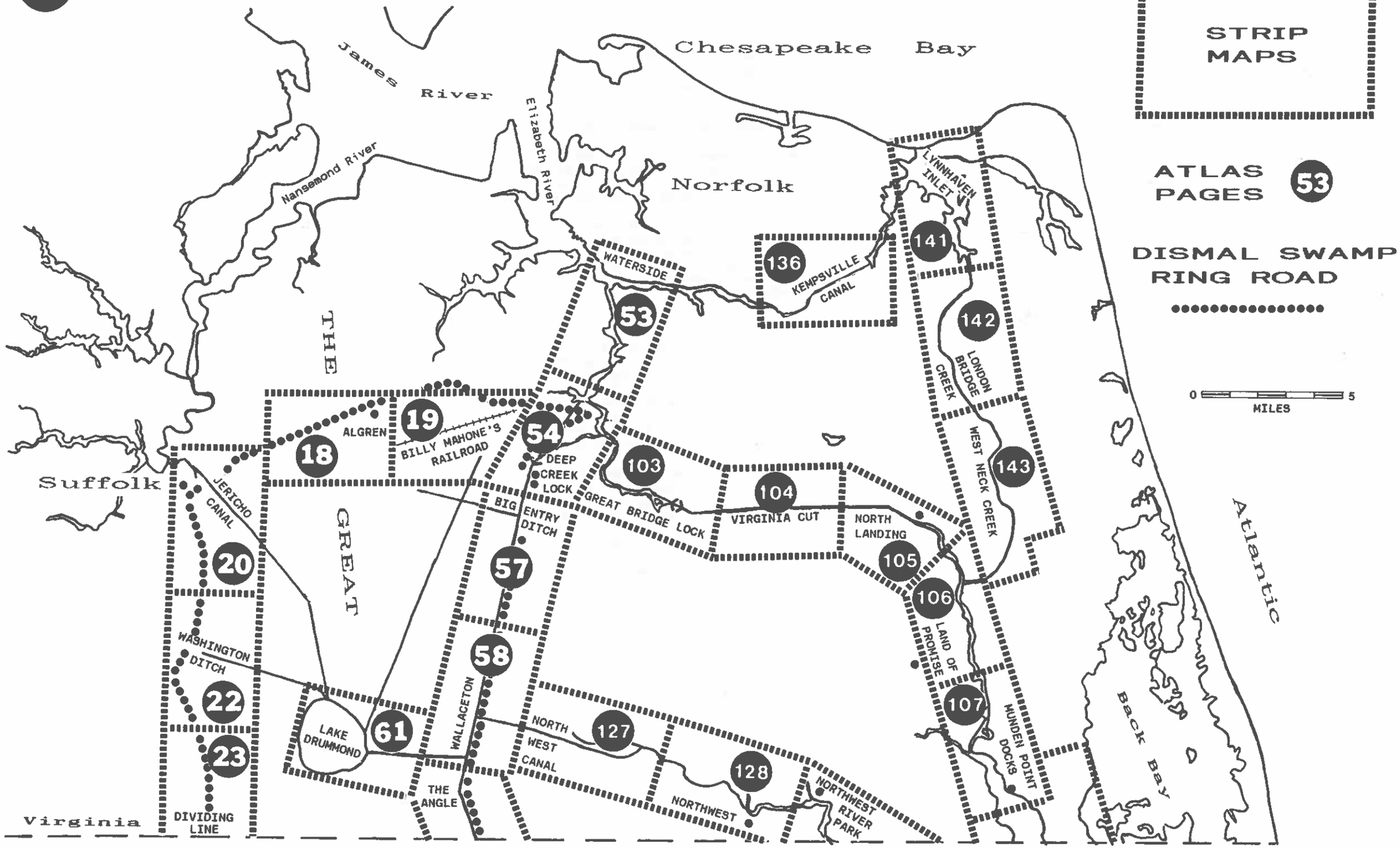
ACKNOWLEDGEMENTS (in addition to those mentioned elsewhere):

Stuart Barker
Mrs. Bernard G. Barrow
W.C. Bateman
Carl Betterton
Alexander C. Brown
Nancy Brown
Carl Cahill
Stephen Chalker
Teresa Cherry
Chuck Conley
Cousteau Society
Charles B. Cross, Jr.
Russell Darden
Herbert J. Davis
Richard A. Davis
Lloyd Dunnavant
Nancy Dunnavant
Elizabeth City C of C
Pat Familar
E.A. Friend, Jr.
William F. Giannini
Dick Gibbons
Lillie Gilbert
Elizabeth B. Hanbury
C.E. & B. Harrell
Caryl Jones
Ralph Keel
Penny Leary-Smith
Mariners Museum Library
Marc Pettingill
Dwayne Plummer
George Ramsey
George Rawls
J.E. Raynor
John Rothert
Tom Rummell
Edith Seiling
Bill Spaur
Johnnie & Richard Stallings
James & Cecil Stewart
Triple-R Ranch
Mrs. W.E. Trout, Jr.
Union Camp Co.
Peggy Van Zant
Dot Wallace
George T. Wallace IV
John G. Wallace, IV
Kelly and Joyce Wood

ADDITIONS AND CORRECTIONS: We cannot be held responsible for the results of errors or information in this guide! We would like to hear from those with further information or interest. Please send additions and corrections to:

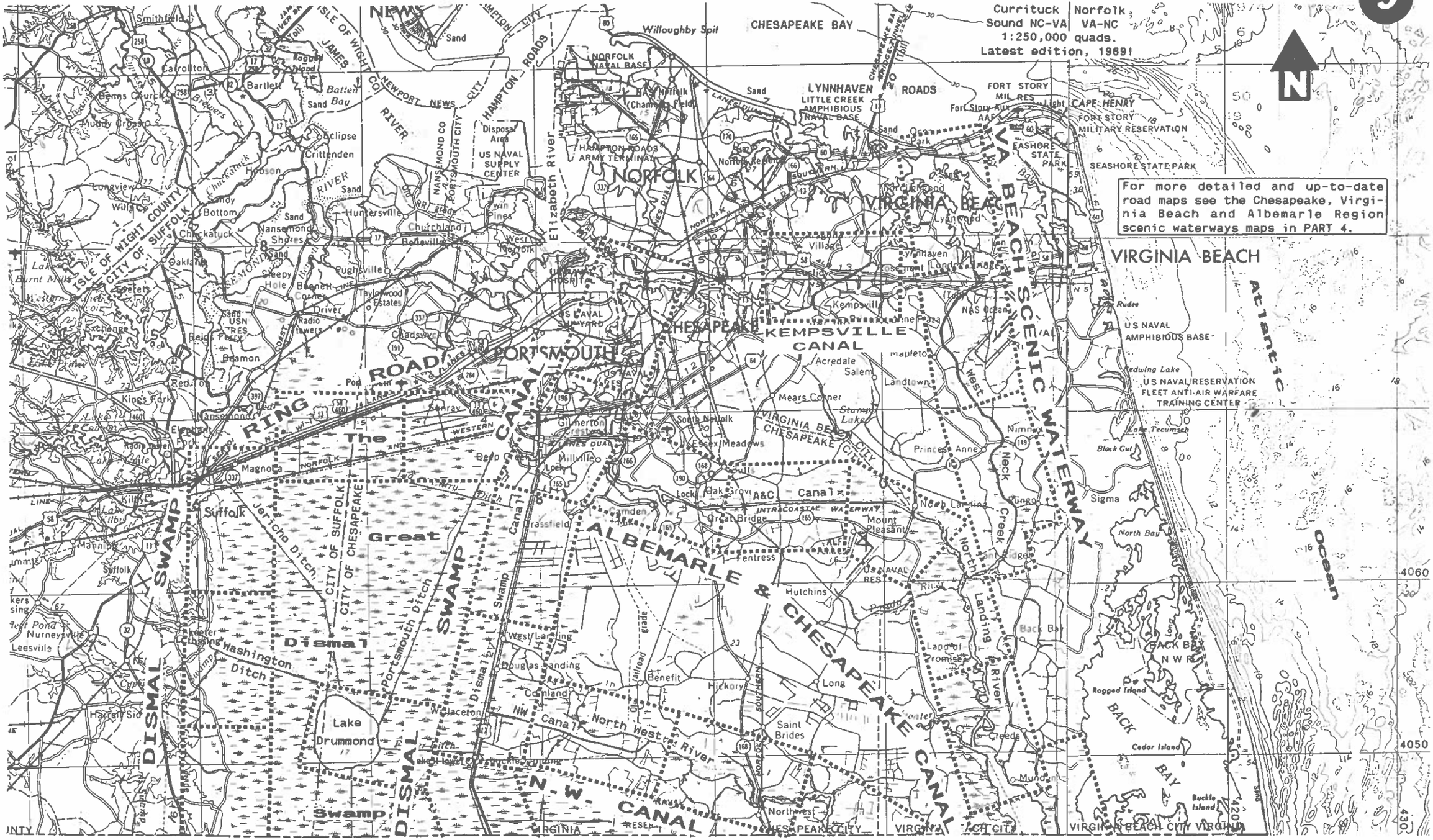
W.E. Trout, III
35 Towana Road
Richmond, VA 23226
(804) 288-1334.

8 INDEX TO THE MAPS: VIRGINIA

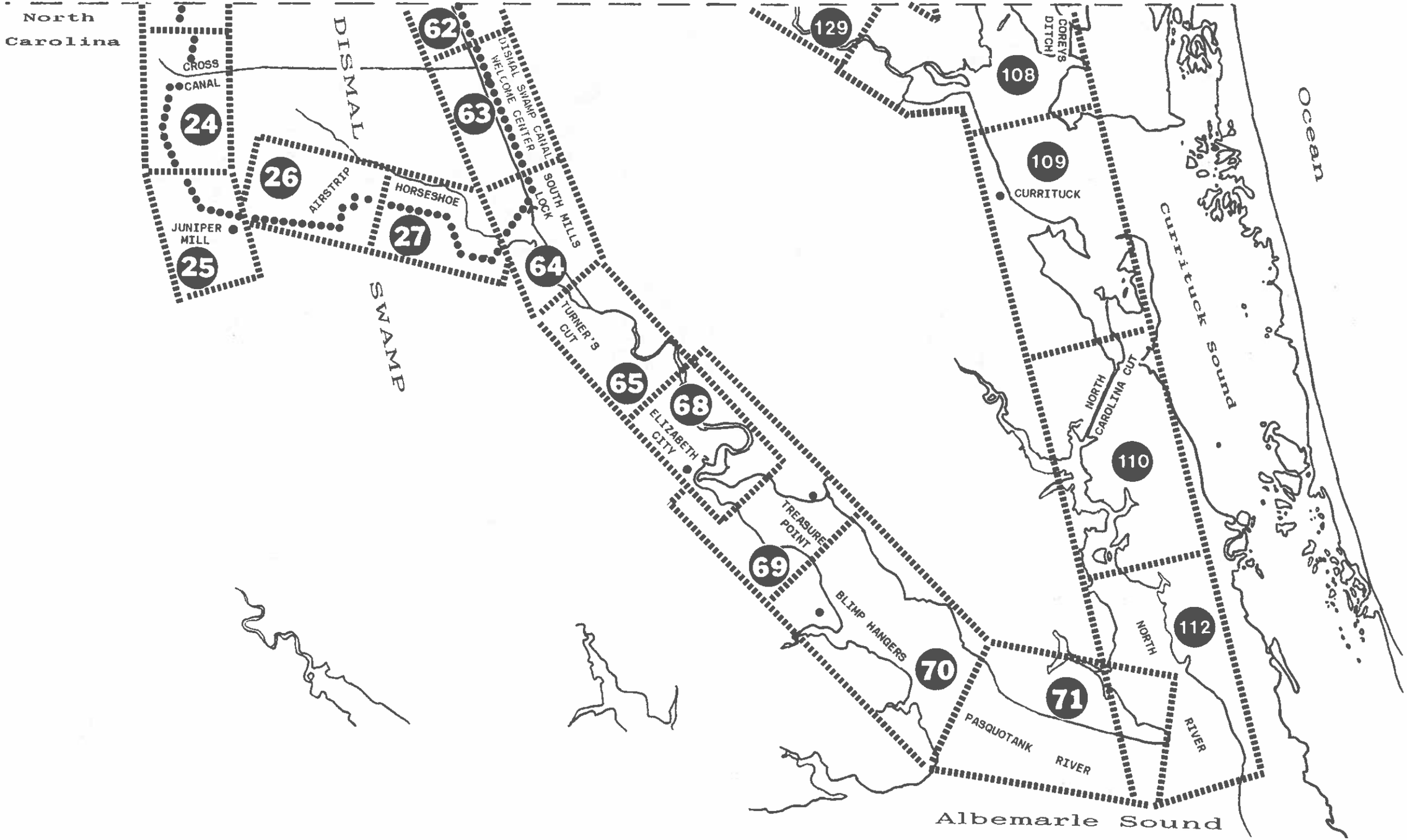


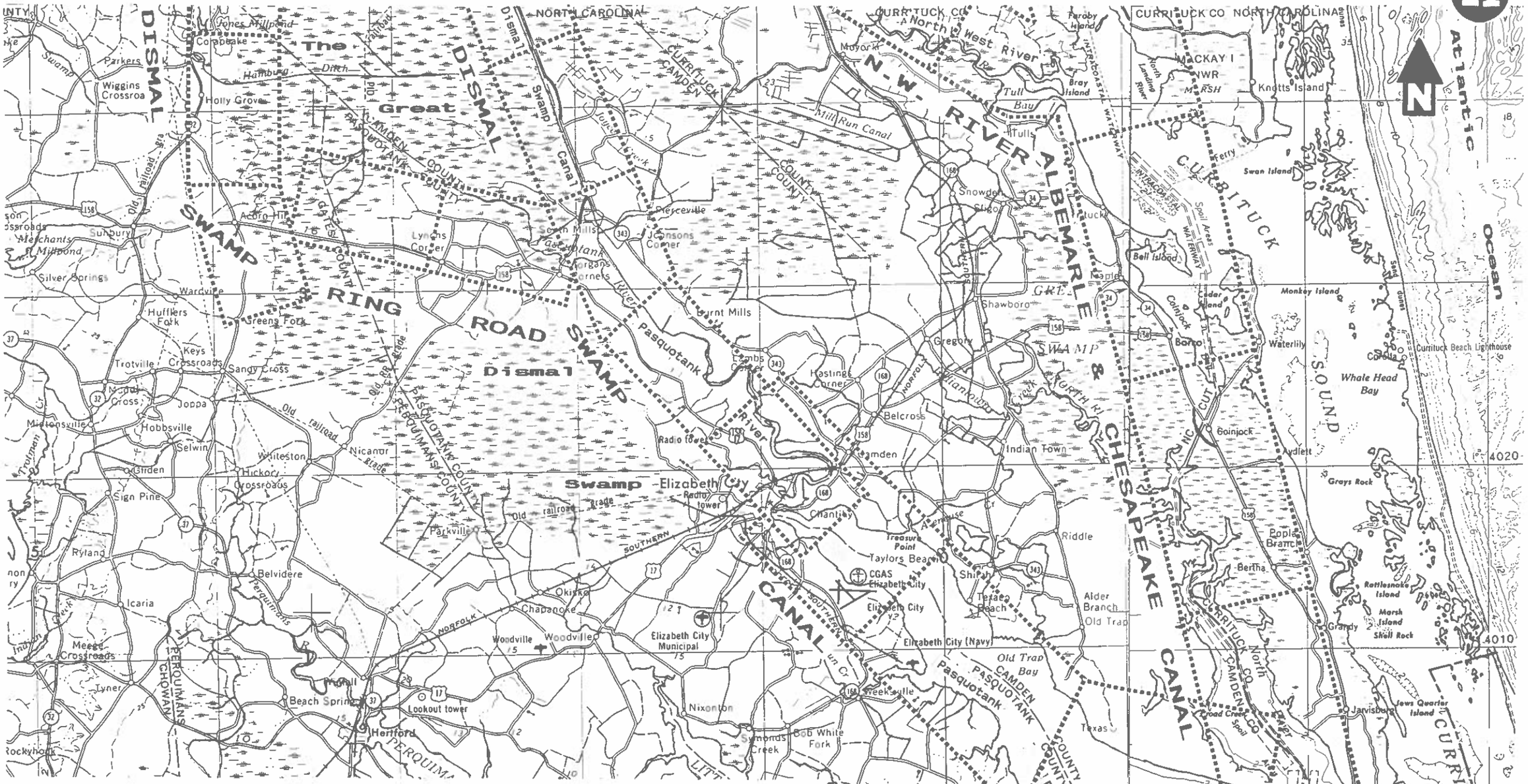
INDEX TO THE MAPS: VIRGINIA

9



INDEX TO THE MAPS: NORTH CAROLINA

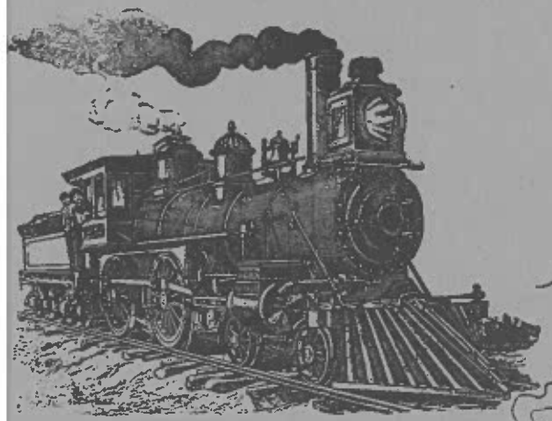


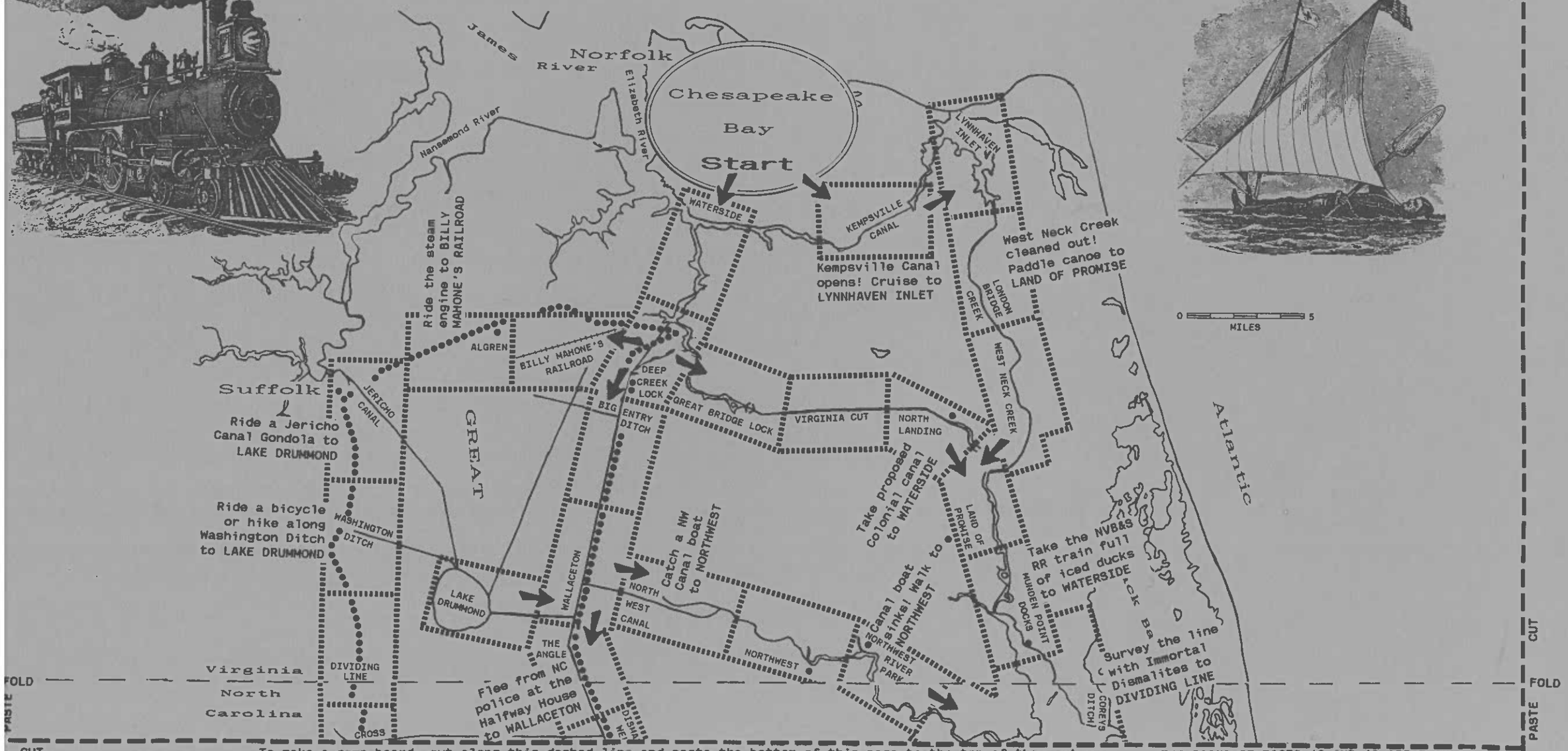

DISMAL SWAMP
The Great Dismal Swamp
RING ROAD
Dismal Swamp
N-W RIVER
ALBEMARLE & CHESAPEAKE CANAL
CURRITUCK SOUND
Atlantic Ocean
NORTH CAROLINA
CURRITUCK CO
CAMDEN CO
PASQUOTANK COUNTY
PERQUIMANS COUNTY
Elizabeth City
Elizabeth City Municipal
Elizabeth City (Navy)
CGAS Elizabeth City
Woodville
Hertford
Belcross
Camden
Indian Town
Shawboro
Gregory
Burnt Mills
Pasquotank River
Perquimans River
Dismal Swamp Canal
Mill Run Canal
Currituck Beach Lighthouse
Whale Head Bay
Old Trap Bay
Pasquotank River
Scale 1:250,000
20 Statute Miles
30 Kilometers
10 Nautical Miles
ALBEMARLE
Currituck Sound NC-VA 1:250,000 quads.
Norfolk VA-NC
SOUND

The Great Dismal Atlas Board Game

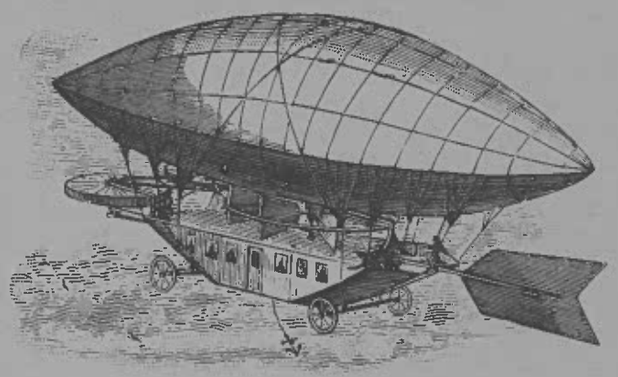
BY WATER, LAND AND AIR FROM THE CHESAPEAKE BAY TO ALBEMARLE SOUND:

A GAME FOR ONE OR MORE PLAYERS, ALONG THE PAGES OF THE GREAT DISMAL ATLAS





FOLD — — —



North Carolina

CROSS CANAL

Pole a batteau on the Cross Canal to DISMAL SWAMP CANAL WELCOME CENTER

DISMAL SWAMP CANAL WELCOME CENTER

JUNIPER MILL

AIRSTRIP

HORSESHOE

Stop to put out a swamp fire! Fly over the JUNIPER MILL

DISMAL SWAMP

LOCK

SOUTH MILLS

Wounded at the Battle of South Mills! Go back to WALLACETON

TURNER'S CUT

Lost in Moccasin Track! Come out at HORSESHOE

Cart off Blackbeard's loot to TREASURE POINT

ELIZABETH CITY

TREASURE POINT

BLIMP HANGERS

Fly an anti-submarine blimp to CURRITUCK

PASQUOTANK RIVER

NORTH RIVER

COREYS DITCH

CURRITUCK

NORTH CAROLINA CUT

Currituck Sound

Yankees block NC cut! Retreat to CURRITUCK

Ocean

Albemarle Sound Finish

Put your marker, such as a coin, in the CHESAPEAKE BAY.
Take turns throwing a die. Move the exact number of squares it indicates.
Arrows show movement options at junctions.
Follow the directions for the square you land in.
The first person to land exactly in ALBEMARLE SOUND wins.
If your move would take you past Albemarle Sound, don't move until your next turn.
For variety, try the game in the other direction, from Albemarle Sound to Chesapeake Bay.
For a real challenge, play to be the last to reach Albemarle Sound or Chesapeake Bay.

c 1997 - Virginia Canals & Navigations Society

HONORING UNION CAMP CORPORATION WHICH DONATED HALF OF THE GREAT DISMAL SWAMP TO THE AMERICAN PEOPLE FOREVER

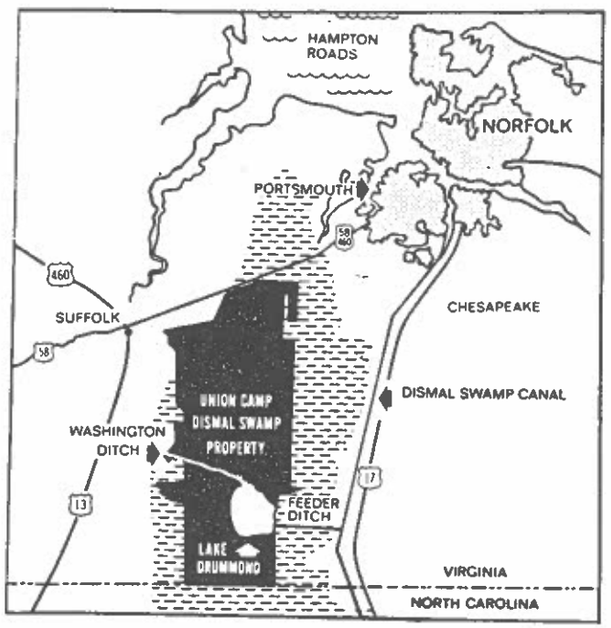
Saving the Great Dismal

The Union Camp Corporation is to be congratulated for its generosity in donating 49,000 acres of the Great Dismal Swamp for use as a national wildlife preserve. The donated land is valued at $12.6 million, but its intrinsic value cannot be reckoned in dollars and cents.

For years conservationists have been fighting to preserve the Dismal Swamp from encroaching progress. There has been talk of development, reclamation, and building programs to make use of the swamp area. Tidewater Virginia has growing pains, and developers have looked upon the Great Dismal with covetous eyes. Union Camp's gift of its Dismal Swamp holdings insures that a significant part of the swamp will remain in its natural state, unspoiled and unexploited by man.

The swamp represents one of the last true wilderness areas in Virginia, with the exception of some mountain reaches at present uneconomical to develop. Its mystery and appeal has endured since the time of Colonel William Byrd, II, who surveyed the area in 1763. He complained of briars and poor drainage; the area was "nothing but a dismal swamp that wasn't fit for man or beast." It may not have been fit for man, but wildlife has found it a haven. It is inhabited by 29 species of mammals, 38 species of fish, 70 species of birds, 100 varieties of butterflies, and 3,000 kinds of vegetation.

Now preservation of this natural area, comprising almost one half of the swamp's total area in Virginia, seems assured. The Union Camp deeds have a clause that will cause the land to revert to its ownership if the government fails to honor its obligation to preserve the swamp in its natural state. The swamp never will be a Disneyland to attract thousands of tourists, but for those who value the rugged wilderness for its own raw beauty, it will be enough to contemplate thousand-year-old bald cypresses at the shores of Lake Drummond. This is worth preserving for the birds, butterflies, fish, and animals, and for man, too.



Union Camp Gift Is Half of Dismal Swamp In Virginia
Region Is One of Largest Wild Areas In East

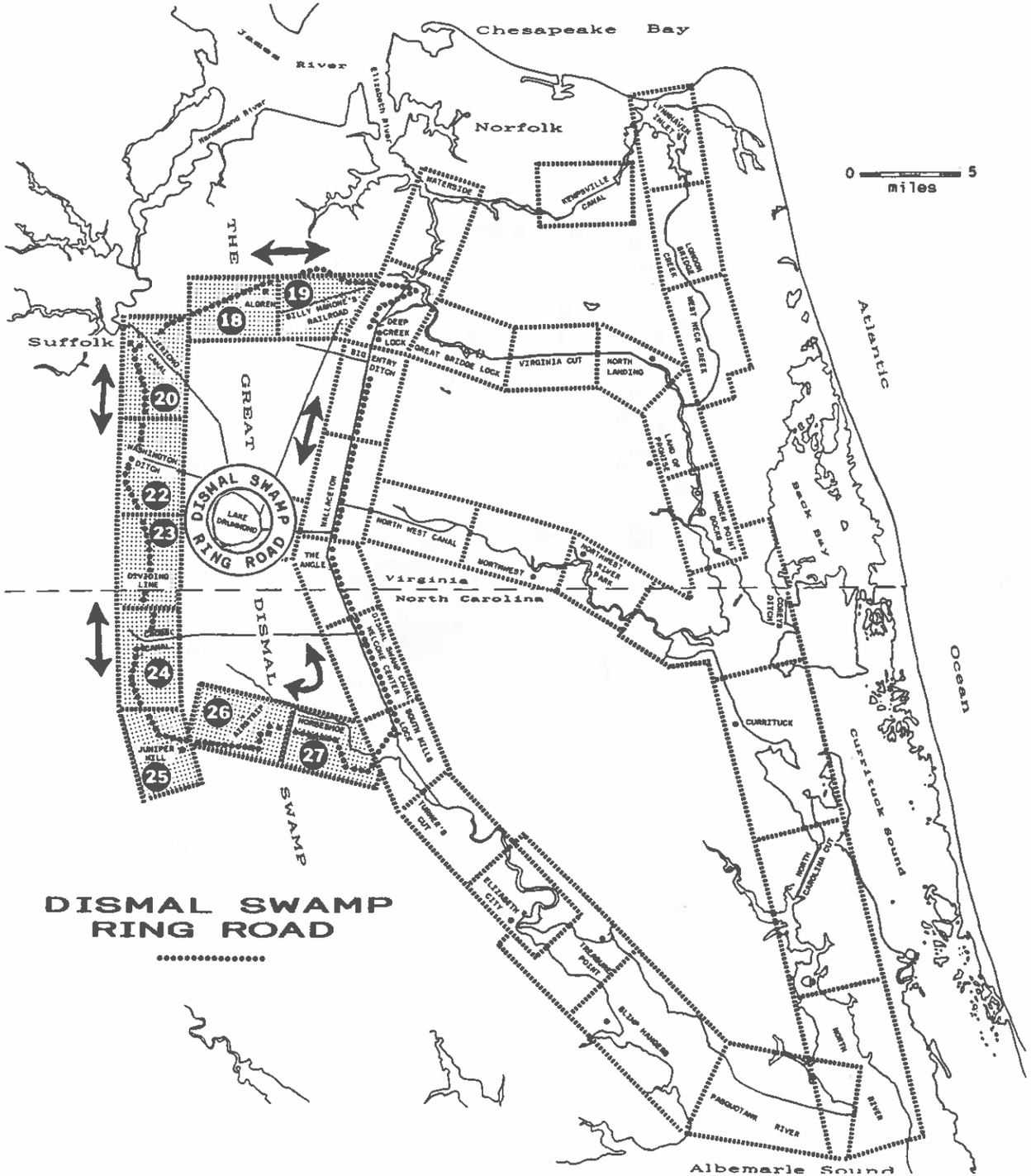
From the January 23, 1973, RICHMOND NEWS LEADER

THE BACKS OF PAGES 11 TO 14 ARE BLANK.

PART 1:

DRIVING THE DISMAL SWAMP RING ROAD:

EXPLORING THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE



DISMAL SWAMP RING ROAD

STRIP MAPS IN PART 1 ARE SHADED

16 DRIVING THE DISMAL SWAMP RING ROAD

In the heart of the Great Dismal Swamp is **THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE**, and around its perimeter is a road, a series of roads - superhighways, country lanes, and a rare stretch of unpaved swamp road. This is the **DISMAL SWAMP RING ROAD**, indicated on the maps in this atlas by double arrows. **PART 1** of the atlas covers the Dismal Swamp Ring Road around the north, west and south side of the swamp, a distance of 48 miles not including side trips and excursions into the Wildlife Refuge. See PART 2 for the rest of the ring road, 23 miles on US 17 along the Dismal Swamp Canal.

Introduce yourself to the Great Dismal Swamp by driving completely around its center, stopping to visit access points to the interior, historic canal locks, and other points of interest. It takes over two hours to drive the full 70 miles of the Dismal Swamp Ring Road without stopping, and there are plenty of things to stop for. To make a two-day trip of it, there are campgrounds in the region (see "useful information") and motels in Elizabeth City, Coinjock, Suffolk, and the Norfolk/Portsmouth area.

As suggested by the double arrows, you can start anywhere on the Dismal Swamp Ring Road and go clockwise or counterclockwise, following the strip maps backward or forward. The directions on this page will take you counterclockwise around the swamp, starting on US 13 at I-64 near Portsmouth. The directions follow the strip maps in order, across the north side of the swamp from Portsmouth to Suffolk, then down the west side of the swamp into North Carolina, and across the south side of the swamp to Morgans Corners near South Mills. The rest of the ring, along US 17, is covered in PART 2.

As you follow the directions on this page, consult the strip maps for details. Abbreviations: L and R are left and right; N, S, E and W are compass directions. Mileages are given between stops or turns.

ATLAS PAGE **ITINERARY**

19 This itinerary arbitrarily begins on US 13 at I-64 near Portsmouth. (**SIDE TRIP**: A little-known access point to Dismal Swamp trails is south of here on the **PORTSMOUTH DITCH**. See the atlas page for details.)

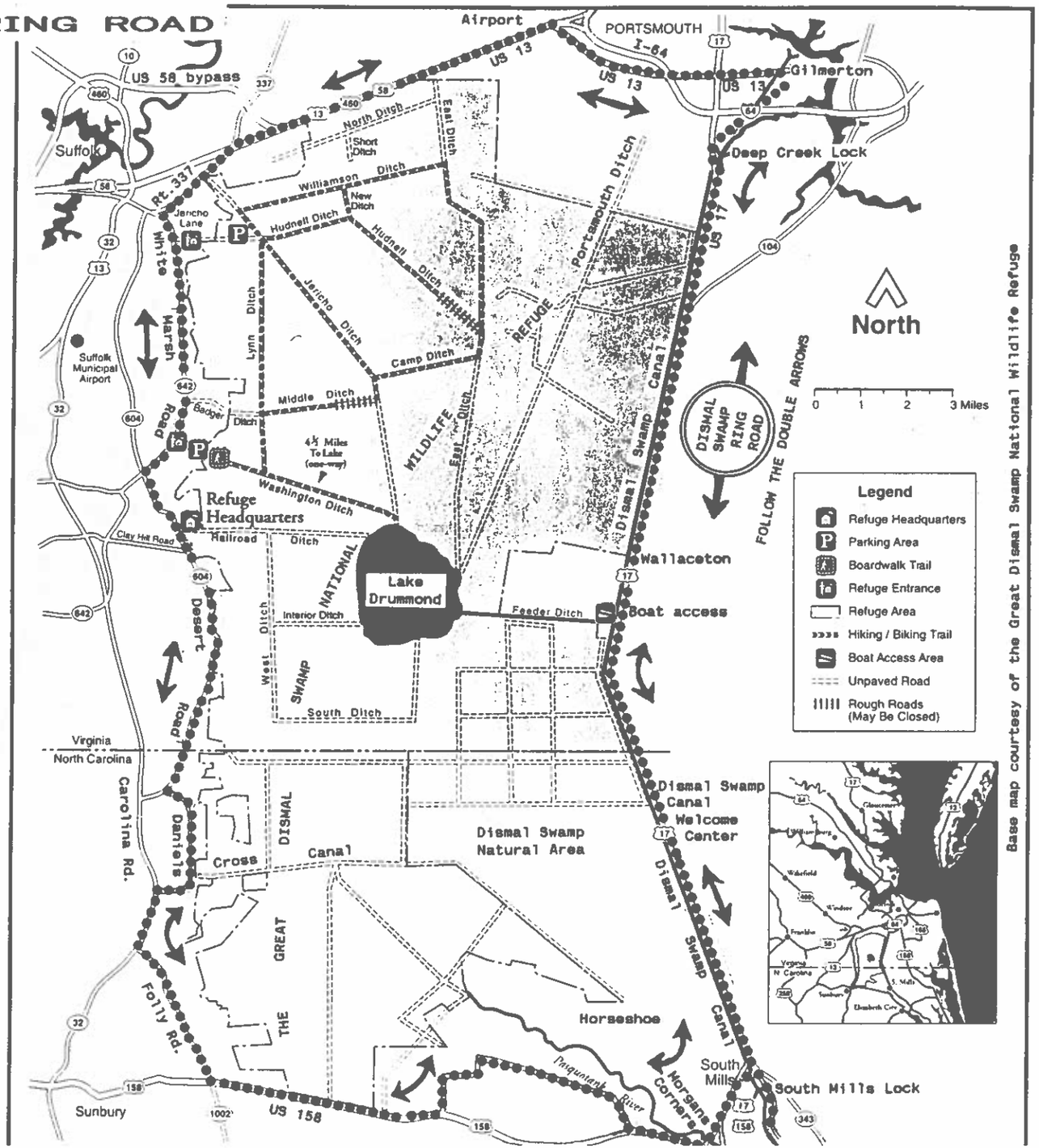
18 Follow US 13 South toward Suffolk to the **HAMPTON ROADS AIRPORT**, 5.3 miles, through a complicated interchange. Keep following US 13 **SOUTH**. (**SIDE TRIP**: Take an **AIR TOUR OF THE SWAMP** at the airport.)

West of the airport you are driving through the **GREAT DISMAL SWAMP** itself, which extends both north and south. Until the railroad cut through it in 1834 and the road in the 1940's(?) this was wilderness.

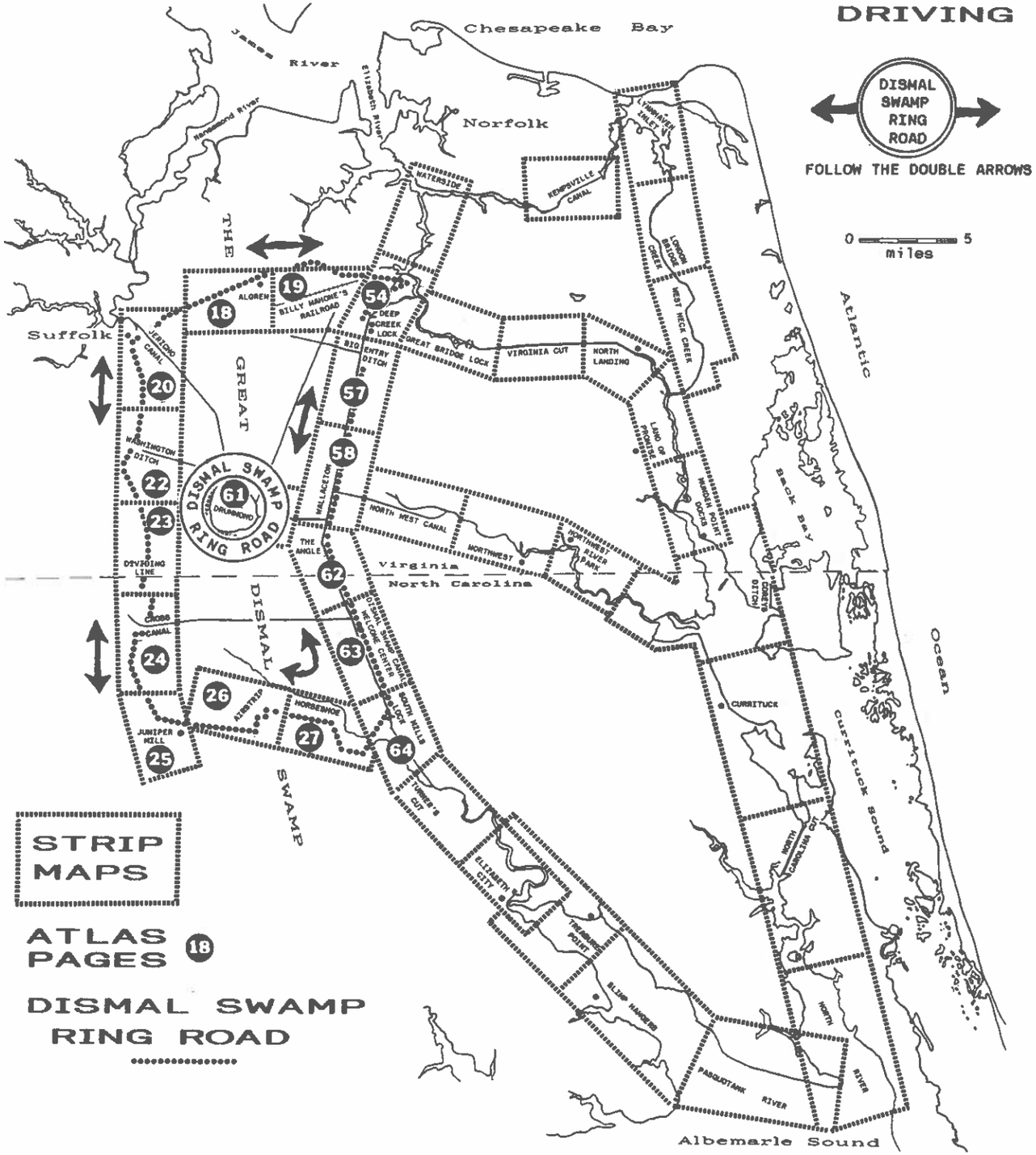
20 Continue on US 13 South (not the US 58/460 bypass) for 5.4 miles and turn left on Rt.337 (Washington Street) into **SUFFOLK**.

After 1.0 mile on Washington Street stop at the cemetery (R) opposite J.F. Kennedy Middle School. **THE JERICHO CANAL** (or Ditch) once crossed Washington Street here to a dock and mill in the village of **JERICHO**, now gone but worth an archaeological study to try to find it. Built in 1810, the canal was the major route for boating shingles from the swamp to sailing ships in Shingle Creek, and boating tourists to Lake Drummond.

Continue 1.2 miles west on Washington St. and turn L onto White Marsh Road, which becomes Rt.642.
(**SIDE TRIP**: Visit **RIDDICK'S FOLLY MUSEUM** at 501 N. Main Street.)



DRIVING THE DISMAL SWAMP RING ROAD



20 After 0.8 mile turn L onto Jericho Ditch Lane at the **GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE** sign. After 2.0 miles stop at the parking lot to see the **JERICHO CANAL** and enjoy hiking or cycling the swamp trails.

22 Continue 4.5 more miles south on Rt.642 and turn L at the Refuge sign to the **WASHINGTON DITCH**. At 1.0 miles stop at the parking lot. The Washington Ditch was the first major canal in the swamp, cut during Washington's time, and it is probably the first "Washington Monument" named after him. From here one can take a self-guided tour along the 0.8-mile **BOARDWALK TRAIL** through Dismal Town, and hike or cycle 4½ miles along the ditch to **LAKE DRUMMOND**.

Continue 1.0 mile S on Rt.642 and turn L on Rt.604 (Desert Road) for 1.6 miles to the **GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE HEADQUARTERS** (L), open on weekdays.
Just beyond it (L) on Rt.642 is the **RAILROAD DITCH** entry to Lake Drummond, accessible by appointment with the Wildlife Refuge.

23 Continue 5.1 miles S on Desert Road to the **STATE LINE**. Don't miss the 1887 marker and the totem pole.

24 After 1.0 mile turn L on Daniels Road, then 2.1 miles to the western terminus of the **CROSS CANAL** (L) also known as the HAMBURG DITCH. This important canal, built in 1822, was Gates County's navigation route to the Dismal Swamp Canal and thence to Norfolk. During the 1800s plans were made to extend the canal to the Chowan River and the Roanoke valley via Bennett's Creek, but it was never done.

25 Continue 1.0 miles S on Daniels Road and turn L (S) on Rt.32, the Carolina Road. After 1.2 miles turn L onto Folly Road (Rt.1002) and go 3.4 miles S to US 158.
(**SIDE TRIP**: Camp or canoe camp in **MERCHANT'S MILLPOND STATE PARK**, on Bennett's Creek.)

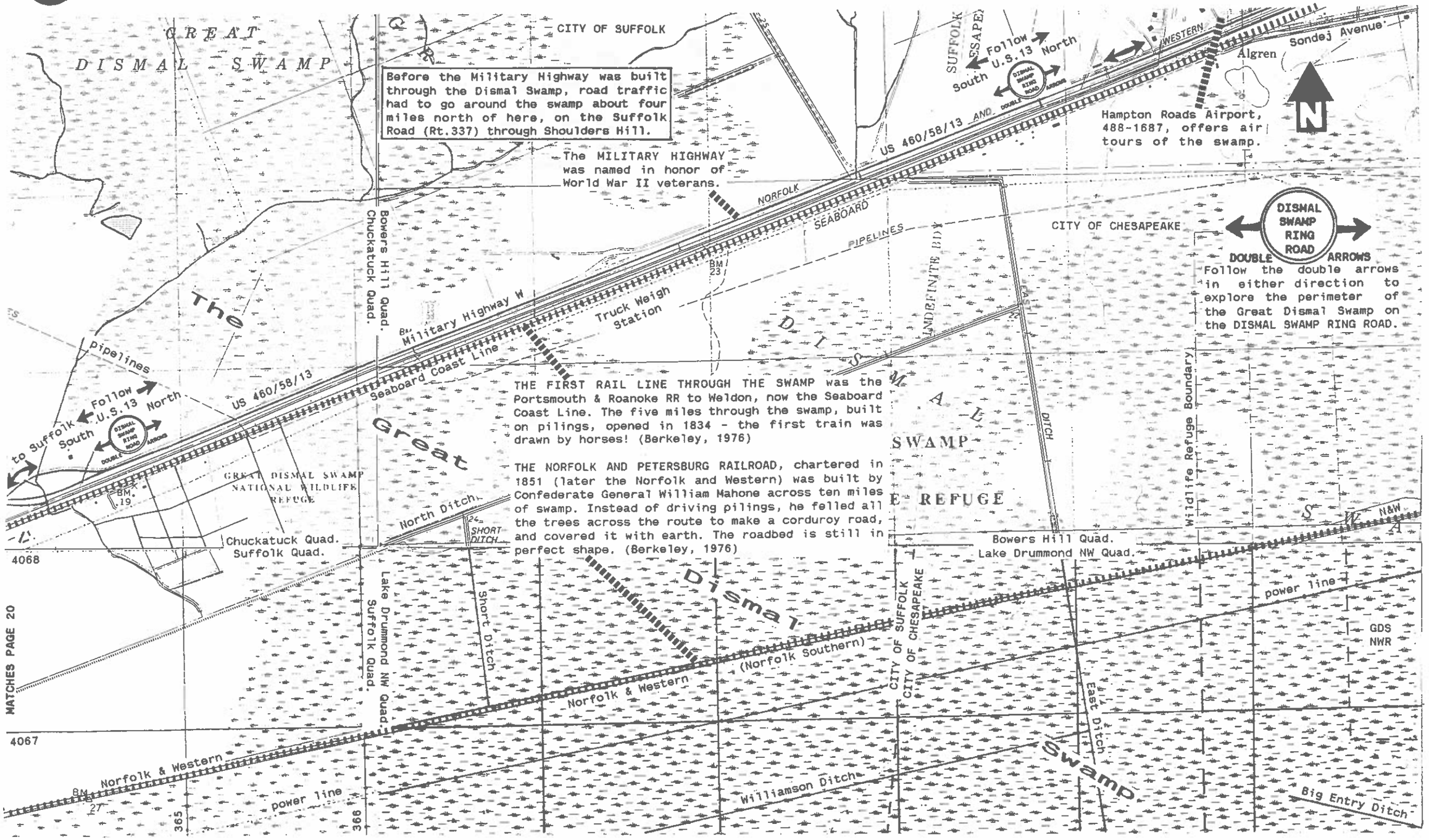
Take US 158 east 1.5 miles into the heart of the **GREAT DISMAL SWAMP**, where at a turnoff (R) are the brick remains of the boiler of **MOSES WHITE'S JUNIPER SAWMILL**, a rare relic of lumbering operations in the Great Dismal worth preserving.
This scenic part of US 158 is appropriately enough a North Carolina Scenic Byway, part of the **LAFAYETTE'S TOUR BYWAY**.

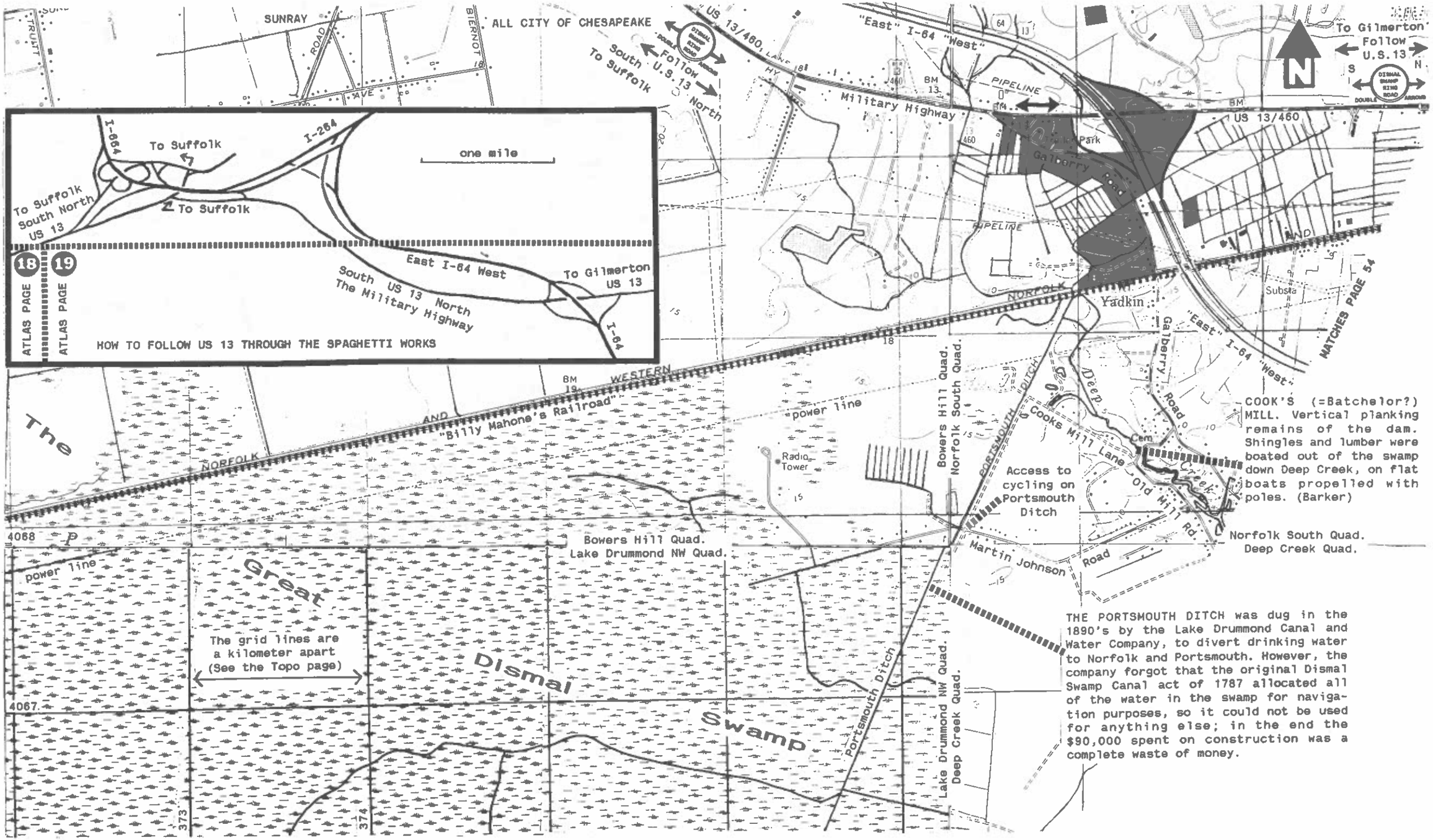
26 Continue E for 4.0 miles to **TADMORE ROAD** (Rt.1367) (L) an unmarked sand road through huge fields reclaimed from the swamp. Here is a chance to get off the highway and onto a country lane.
Tadmore Road turns R after 0.9 mile and L after 0.6 mile. After 0.4 mile turn R onto Fire Tower Road (Rt.1360), following the edge of civilization, and after 4.6 miles bear L onto US 158 for 1.0 mile to **MORGANS CORNERS**. **27**

(**SIDE TRIPS**:
* Visit **JOHNNIES DINER** on Newland Road at Lynchs Corner to see historical photos on the walls and chat about the old days.
* Take US 17 N for 2.0 miles, L on Horseshoe Road (Rt.1219) for 3 miles to the end of the road at **HORSESHOE**.
* Take US 17 S 12 miles to **ELIZABETH CITY** and the **MUSEUM OF THE ALBEMARLE**, then 19 miles E on US 158 to **COINJOCK** and the **NORTH CAROLINA CUT of the ALBEMARLE & CHESAPEAKE CANAL**.)

50 **PART 1 of the DISMAL SWAMP RING ROAD ends at Morgans Corners.** See PART 2 to complete the ring to Portsmouth, via **SOUTH MILLS** and the **DISMAL SWAMP CANAL**.

18 ALGREN

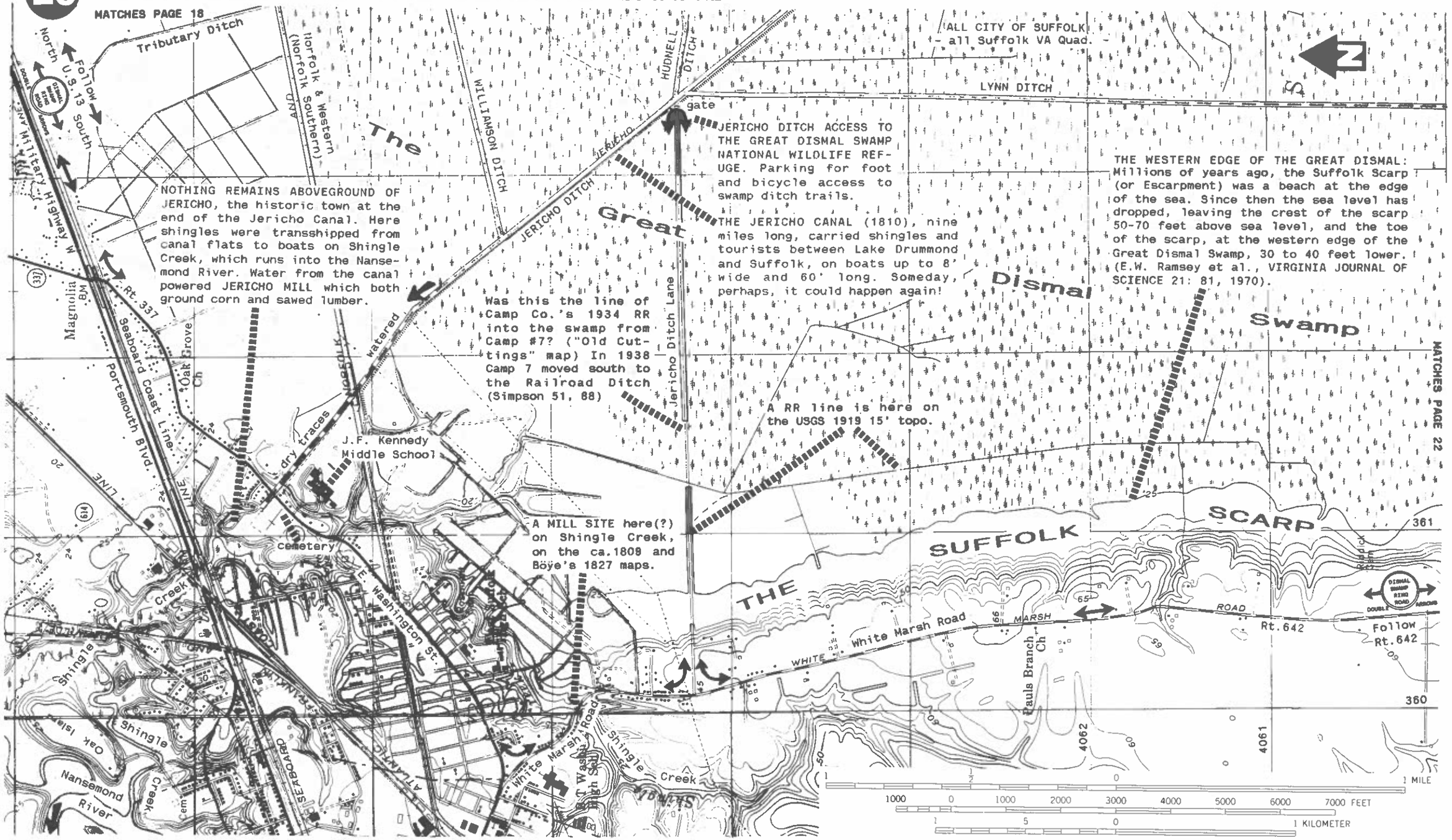

GREAT DISMAL SWAMP
CITY OF SUFFOLK
Before the Military Highway was built through the Dismal Swamp, road traffic had to go around the swamp about four miles north of here, on the Suffolk Road (Rt.337) through Shoulders Hill.
The MILITARY HIGHWAY was named in honor of World War II veterans.
US 460/58/13 AND
NORFOLK SEABOARD
PIPELINES
CITY OF CHESAPEAKE
Follow U.S.13 North
South
SUFFOLK CHESAPEAKE
WESTERN
Sondej Avenue
Algren
Hampton Roads Airport, 488-1687, offers air tours of the swamp.
DISMAL SWAMP RING ROAD
DOUBLE ARROWS
Follow the double arrows in either direction to explore the perimeter of the Great Dismal Swamp on the DISMAL SWAMP RING ROAD.
Bowers Hill Quad.
Chuckatuck Quad.
Military Highway W
Truck Weigh Station
BM 23
Seaboard Coast Line
THE FIRST RAIL LINE THROUGH THE SWAMP was the Portsmouth & Roanoke RR to Weldon, now the Seaboard Coast Line. The five miles through the swamp, built on pilings, opened in 1834 - the first train was drawn by horses! (Berkeley, 1976)
THE NORFOLK AND PETERSBURG RAILROAD, chartered in 1851 (later the Norfolk and Western) was built by Confederate General William Mahone across ten miles of swamp. Instead of driving pilings, he felled all the trees across the route to make a corduroy road, and covered it with earth. The roadbed is still in perfect shape. (Berkeley, 1976)
Pipelines
Follow U.S.13 North
to Suffolk
South
US 460/58/13
GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE
BM 19
Chuckatuck Quad.
Suffolk Quad.
4068
North Ditch
SHORT DITCH
Lake Drummond NW Quad.
Suffolk Quad.
Short Ditch
Dismal
Swamp
Norfolk & Western (Norfolk Southern)
Norfolk & Western
power line
BM 27
4067
365
366
Williamson Ditch
East Ditch
Big Entry Ditch
CITY OF SUFFOLK
CITY OF CHESAPEAKE
EAST DITCH
Wildlife Refuge Boundary
Bowers Hill Quad.
Lake Drummond NW Quad.
power line
GDS NWR
N&W
MATCHES PAGE 20



COOK'S (=Batchelor?) MILL. Vertical planking remains of the dam. Shingles and lumber were boated out of the swamp down Deep Creek, on flat boats propelled with poles. (Barker)

THE PORTSMOUTH DITCH was dug in the 1890's by the Lake Drummond Canal and Water Company, to divert drinking water to Norfolk and Portsmouth. However, the company forgot that the original Dismal Swamp Canal act of 1787 allocated all of the water in the swamp for navigation purposes, so it could not be used for anything else; in the end the $90,000 spent on construction was a complete waste of money.

20 SUFFOLK AND THE JERICHO CANAL


MATCHES PAGE 18
ALL CITY OF SUFFOLK
- all Suffolk VA Quad.
Tributary Ditch
Norfolk & Western (Norfolk Southern) RR
WILLIAMSON DITCH
HUDNELL DITCH
LYNN DITCH
gate
JERICHO DITCH ACCESS TO THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE. Parking for foot and bicycle access to swamp ditch trails.
THE JERICHO CANAL (1810), nine miles long, carried shingles and tourists between Lake Drummond and Suffolk, on boats up to 8' wide and 60' long. Someday, perhaps, it could happen again!
THE WESTERN EDGE OF THE GREAT DISMAL: Millions of years ago, the Suffolk Scarp (or Escarpment) was a beach at the edge of the sea. Since then the sea level has dropped, leaving the crest of the scarp 50-70 feet above sea level, and the toe of the scarp, at the western edge of the Great Dismal Swamp, 30 to 40 feet lower. (E.W. Ramsey et al., VIRGINIA JOURNAL OF SCIENCE 21: 81, 1970).
Follow U.S. 13 South
North
Military Highway
NOTHING REMAINS ABOVEGROUND OF JERICHO, the historic town at the end of the Jericho Canal. Here shingles were transshipped from canal flats to boats on Shingle Creek, which runs into the Nansemond River. Water from the canal powered JERICHO MILL which both ground corn and sawed lumber.
Was this the line of Camp Co.'s 1934 RR into the swamp from Camp #7? ("Old Cuttings" map) In 1938 Camp 7 moved south to the Railroad Ditch (Simpson 51, 88)
A RR line is here on the USGS 1919 15' topo.
Magnolia
Rt. 337
Seaboard Coast Line
Portsmouth Blvd.
Oak Grove Ch
watered
Jericho Ditch Lane
JERICHO DITCH
The Great Dismal Swamp
MATCHES PAGE 22
J.F. Kennedy Middle School
dry traces
cemetery
A MILL SITE here(?) on Shingle Creek, on the ca.1809 and Böye's 1827 maps.
SUFFOLK SCARP
THE
White Marsh Road
WHITE MARSH ROAD
Rt.642
Follow Rt.642
Tauls Branch Ch
Shingle Creek
Oak Island
Nansemond River
Cem
SEABOARD
ATLANTIC
SHINGLE
4062
4061
361
360
1 MILE
7000 FEET
1 KILOMETER
Contour Interval 5 Feet

SHINGLE CREEK AT JERICHO IN 1983

Here on SHINGLE CREEK was the village of JERICHO, its docks and its mills. At its height in the early 1800's it was a busy place. It was the northern terminus of the JERICHO CANAL, ten miles long, built by the Dismal Swamp Land Company of which George Washington was the first manager.

Here were JERICHO MILLS which ground corn and sawed lumber, powered by water falling from the end of the canal down to tidal Shingle Creek.

Here were docks at the end of the canal, and more docks down in Shingle Creek. The canal was the major navigation route for floating "shingle flats" loaded with shingles, and logs for the sawmill, from the heart of the Dismal Swamp to the canal docks at Jericho. Here millions of shingles were carted down the slope from the canal to sailing ships moored at the docks on Shingle Creek.

Jericho is also remembered as the jumping-off place for tourists visiting the swamp, who boarded "gondolas" and later a narrow steamboat for stately voyages to Lake Drummond.

Nothing remains aboveground today of Jericho and its docks. This important Dismal Swamp site deserves a thorough historical and archaeological study. Does a map of Jericho exist?

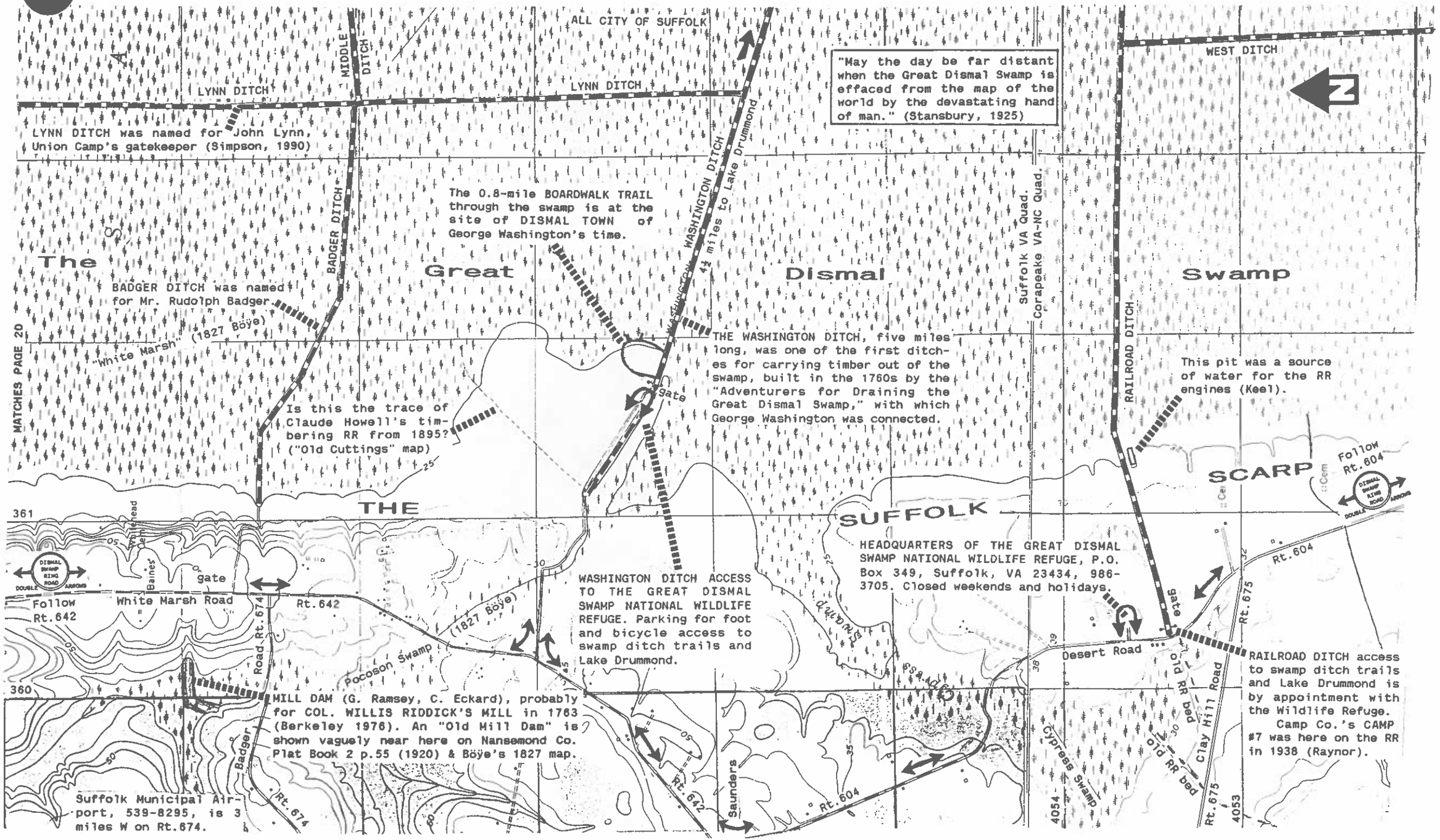
THE LOST VILLAGE OF JERICHO

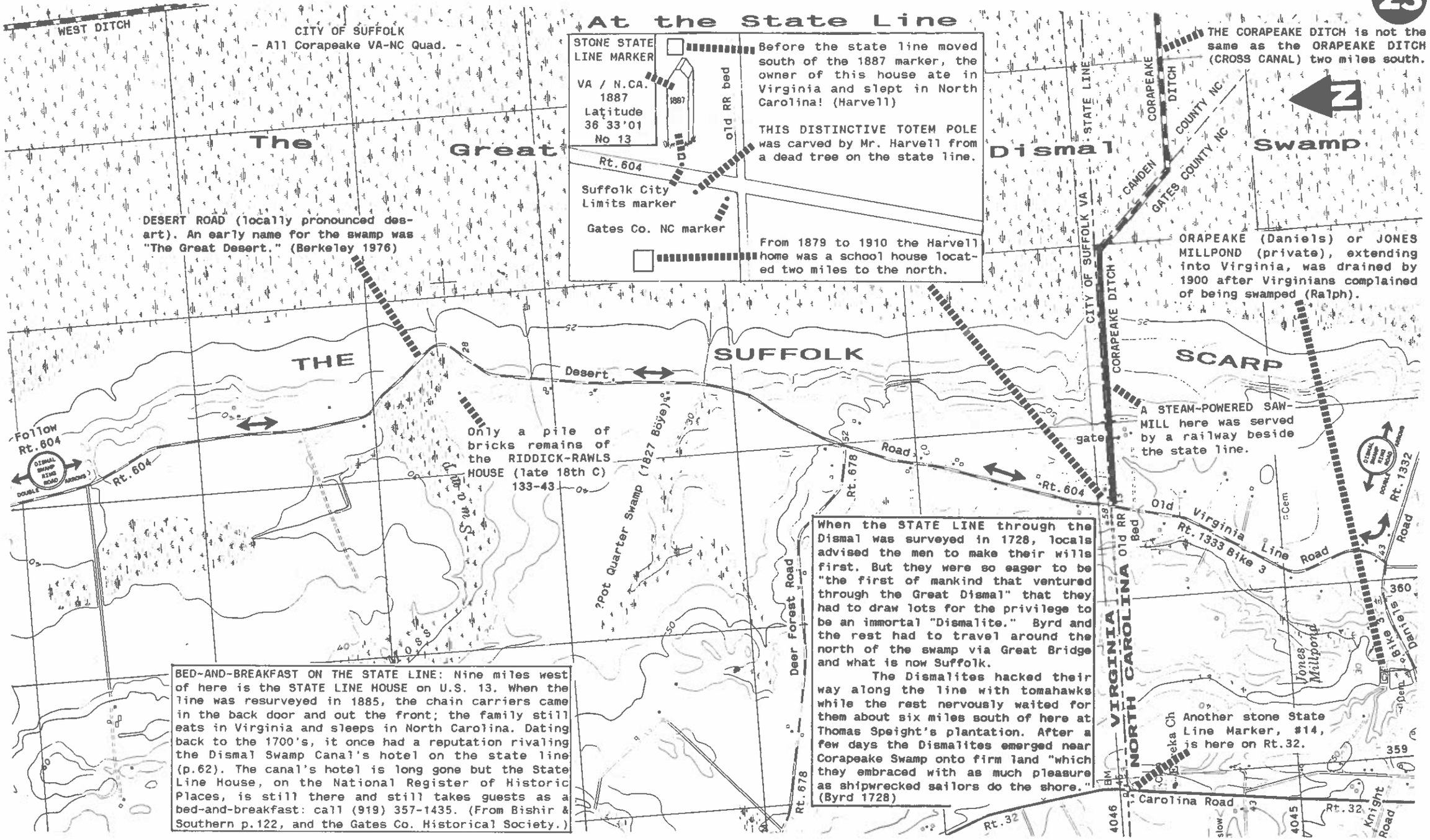
From HARPER'S NEW MONTHLY MAGAZINE
September 1856, p.444 (VC&NS Collection)

This GONDOLA took tourists from Suffolk to Lake Drummond, along the Jericho Canal. In later years the JENNIE WILSON, a steamboat shaped like "a knitting needle with a pole for a rudder" paddled to the lake at a stately 2½ miles an hour. Could trips like this happen again?

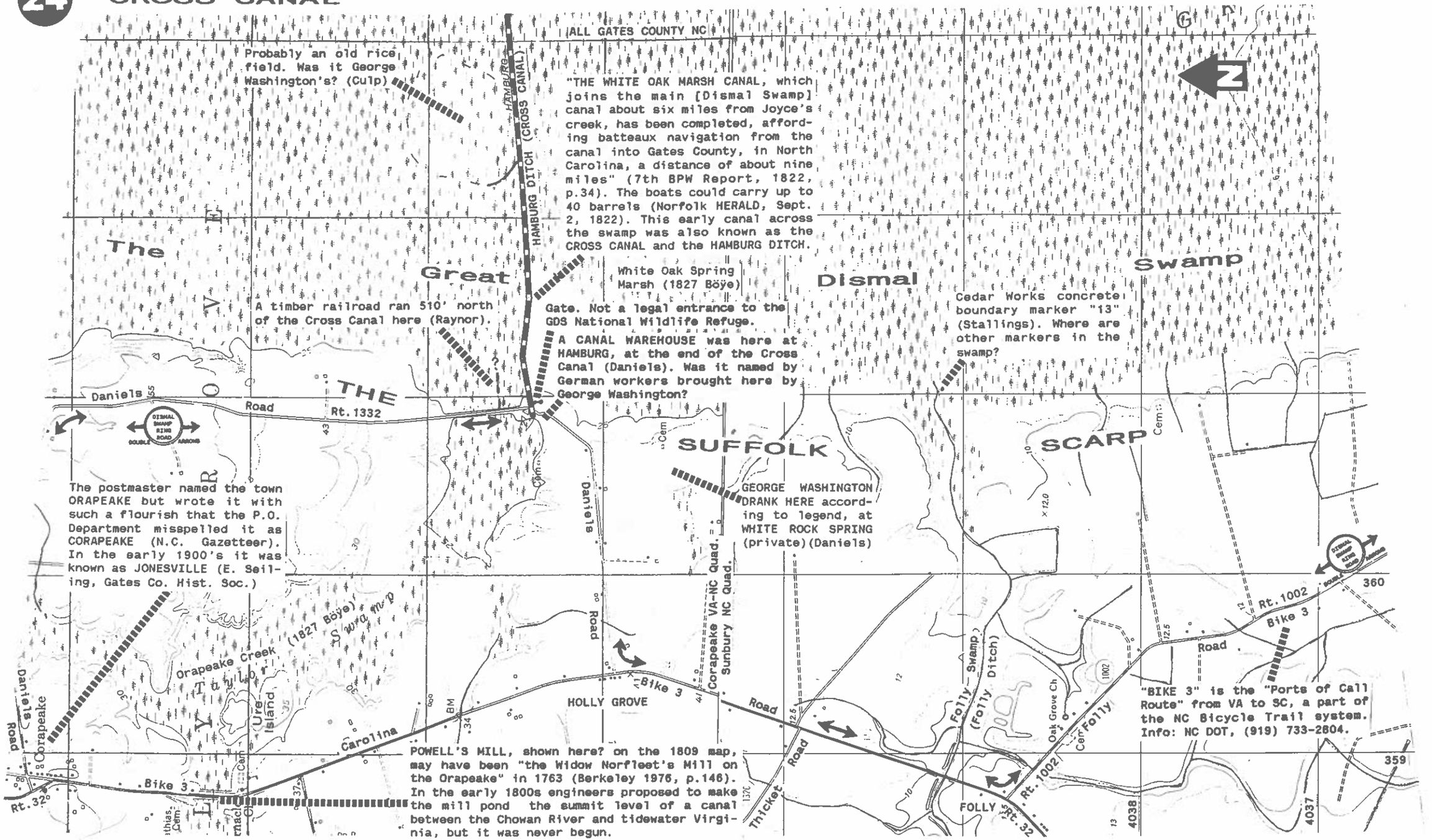
For more about the Jericho Canal see page 34.

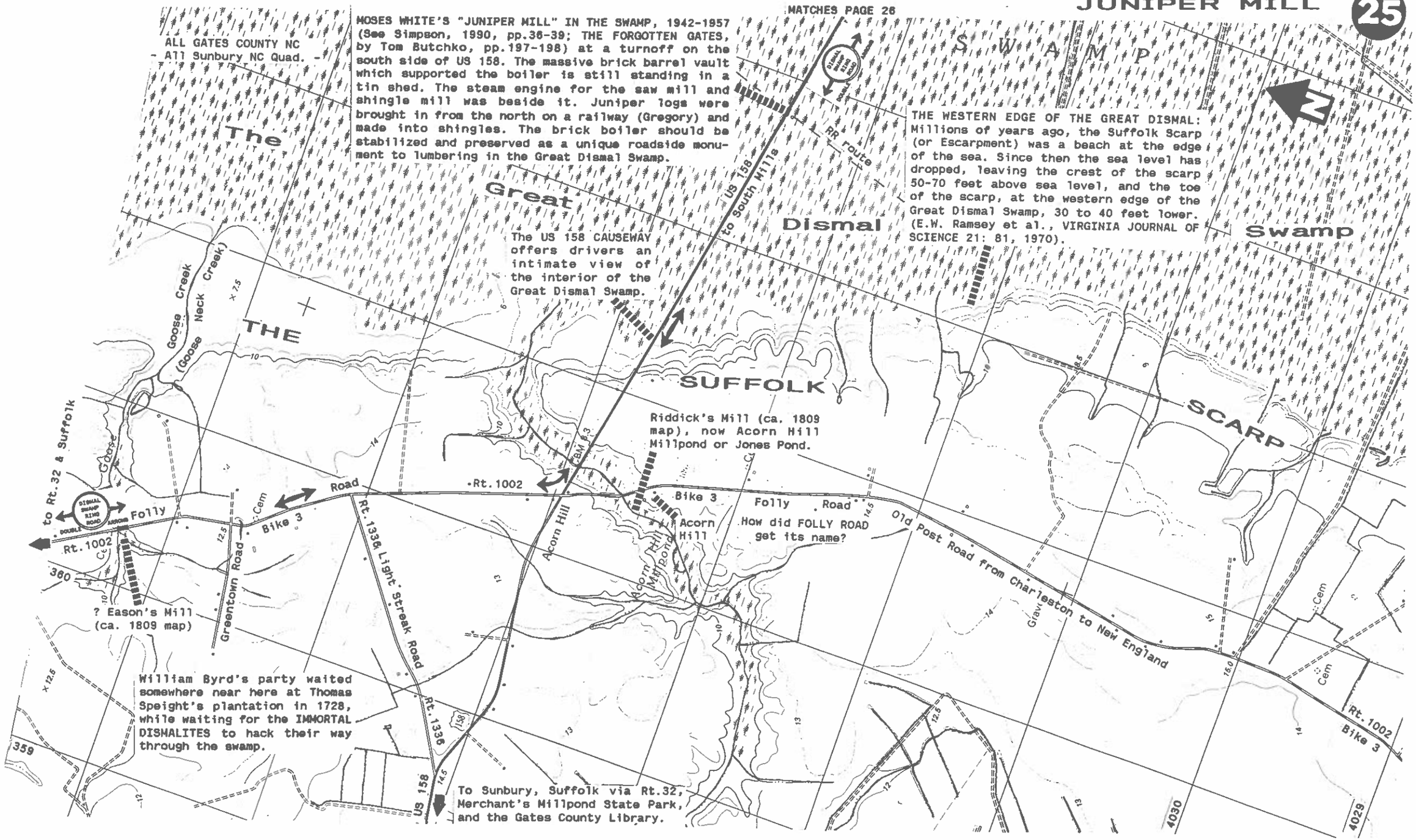
22 WASHINGTON DITCH


ALL CITY OF SUFFOLK
LYNN DITCH
LYNN DITCH
MIDDLE DITCH
LYNN DITCH was named for John Lynn, Union Camp's gatekeeper (Simpson, 1990)
"May the day be far distant when the Great Dismal Swamp is effaced from the map of the world by the devastating hand of man." (Stansbury, 1925)
WEST DITCH
The Great Dismal Swamp
BADGER DITCH
BADGER DITCH was named for Mr. Rudolph Badger
The 0.8-mile BOARDWALK TRAIL through the swamp is at the site of DISMAL TOWN of George Washington's time.
WASHINGTON DITCH
4½ miles to Lake Drummond
Suffolk VA Quad.
Corapeake VA-NC Quad.
RAILROAD DITCH
MATCHES PAGE 20
"White Marsh" (1827 Böye)
Is this the trace of Claude Howell's timbering RR from 1895? ("Old Cuttings" map)
THE WASHINGTON DITCH, five miles long, was one of the first ditches for carrying timber out of the swamp, built in the 1760s by the "Adventurers for Draining the Great Dismal Swamp," with which George Washington was connected.
gate
This pit was a source of water for the RR engines (Keel).
SCARP
Follow Rt.604
THE SUFFOLK
HEADQUARTERS OF THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE, P.O. Box 349, Suffolk, VA 23434, 986-3705. Closed weekends and holidays.
361
Smithhead
Baines
gate
Follow Rt.642
White Marsh Road
Rt.642
Rt.674
Road
WASHINGTON DITCH ACCESS TO THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE. Parking for foot and bicycle access to swamp ditch trails and Lake Drummond.
(1827 Böye)
Pocoson Swamp
Rt.604
Rt.675
Desert Road
gate
RAILROAD DITCH access to swamp ditch trails and Lake Drummond is by appointment with the Wildlife Refuge.
Camp Co.'s CAMP #7 was here on the RR in 1938 (Raynor).
360
MILL DAM (G. Ramsey, C. Eckard), probably for COL. WILLIS RIDDICK'S MILL in 1763 (Berkeley 1976). An "Old Mill Dam" is shown vaguely near here on Nansemond Co. Plat Book 2 p.55 (1920) & Böye's 1827 map.
Badger
Rt.674
Suffolk Municipal Airport, 539-8295, is 3 miles W on Rt.674.
Saunders
Rt.642
Rt.604
Cypress Swamp
Old RR bed
Clay Hill Road
Old RR bed
Rt.675
4054
4053

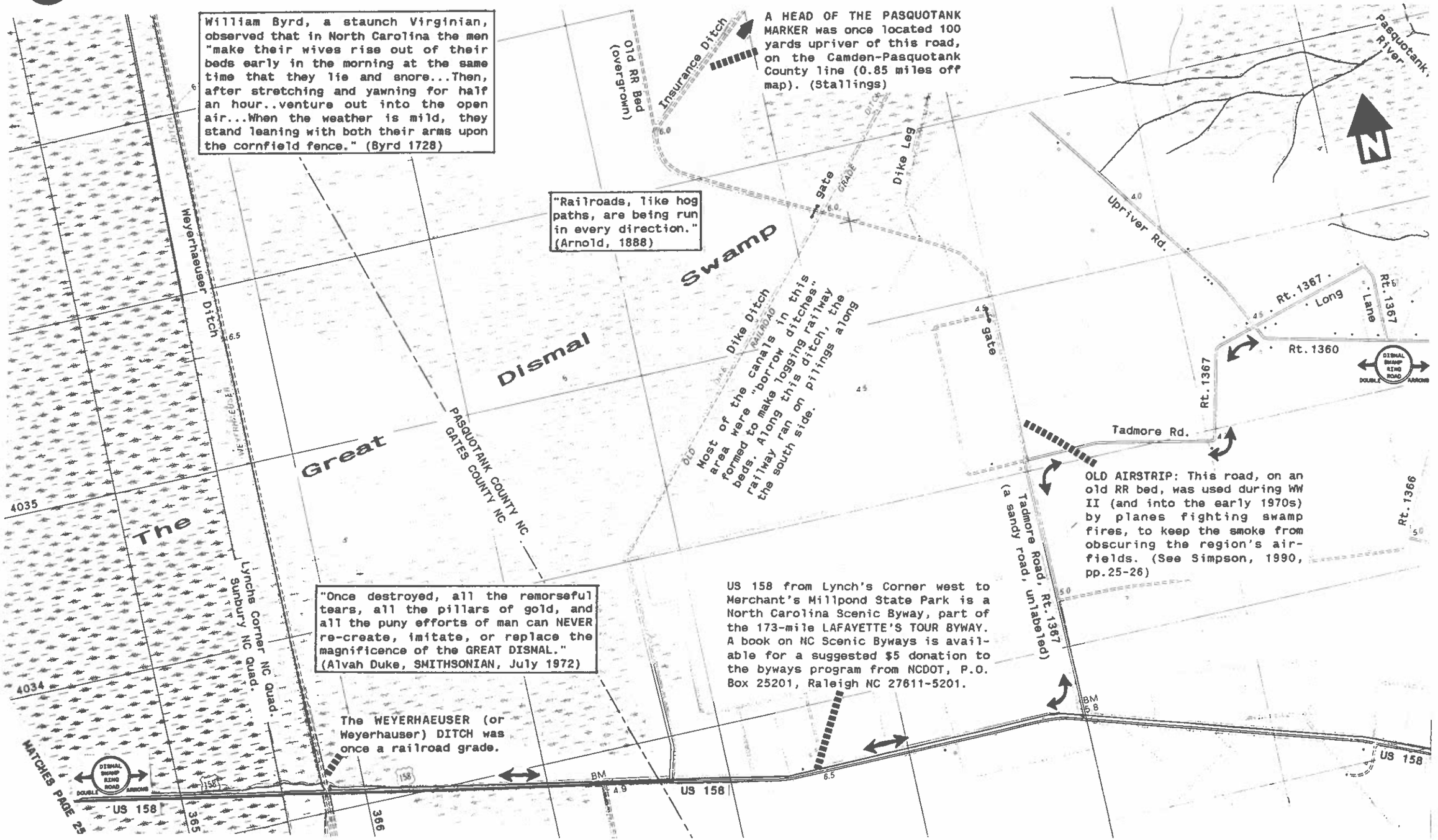

WEST DITCH
CITY OF SUFFOLK
- All Corapeake VA-NC Quad. -
At the State Line
STONE STATE LINE MARKER
VA / N.CA.
1887
Latitude
36 33'01
No 13
1887
old RR bed
Before the state line moved south of the 1887 marker, the owner of this house ate in Virginia and slept in North Carolina! (Harvell)
THIS DISTINCTIVE TOTEM POLE was carved by Mr. Harvell from a dead tree on the state line.
Rt.604
Suffolk City Limits marker
Gates Co. NC marker
From 1879 to 1910 the Harvell home was a school house located two miles to the north.
The Great Dismal Swamp
STATE LINE
CITY OF SUFFOLK VA
CORAPEAKE DITCH
CAMDEN COUNTY NC
GATES COUNTY NC
THE CORAPEAKE DITCH is not the same as the ORAPEAKE DITCH (CROSS CANAL) two miles south.
DESERT ROAD (locally pronounced desart). An early name for the swamp was "The Great Desert." (Berkeley 1976)
ORAPEAKE (Daniels) or JONES MILLPOND (private), extending into Virginia, was drained by 1900 after Virginians complained of being swamped (Ralph).
THE SUFFOLK SCARP
Desert
Only a pile of bricks remains of the RIDDICK-RAWLS HOUSE (late 18th C) 133-43
?Pot Quarter Swamp (1827 Böye)
A STEAM-POWERED SAW-MILL here was served by a railway beside the state line.
gate
Follow Rt.604
Rt.604
Rt.678
Rt.604
Old RR Bed
Old Virginia Line Road
Rt.1333 Bike 3
Rt.1332
Road
Deer Forest Road
Rt.678
When the STATE LINE through the Dismal was surveyed in 1728, locals advised the men to make their wills first. But they were so eager to be "the first of mankind that ventured through the Great Dismal" that they had to draw lots for the privilege to be an immortal "Dismalite." Byrd and the rest had to travel around the north of the swamp via Great Bridge and what is now Suffolk.
The Dismalites hacked their way along the line with tomahawks while the rest nervously waited for them about six miles south of here at Thomas Speight's plantation. After a few days the Dismalites emerged near Corapeake Swamp onto firm land "which they embraced with as much pleasure as shipwrecked sailors do the shore." (Byrd 1728)
VIRGINIA
NORTH CAROLINA
Jones Millpond
Bike 3
Daniels
Another stone State Line Marker, #14, is here on Rt.32.
Carolina Road
Rt.32
Knight Road
4046
4045
359
360
BED-AND-BREAKFAST ON THE STATE LINE: Nine miles west of here is the STATE LINE HOUSE on U.S. 13. When the line was resurveyed in 1885, the chain carriers came in the back door and out the front; the family still eats in Virginia and sleeps in North Carolina. Dating back to the 1700's, it once had a reputation rivaling the Dismal Swamp Canal's hotel on the state line (p.62). The canal's hotel is long gone but the State Line House, on the National Register of Historic Places, is still there and still takes guests as a bed-and-breakfast: call (919) 357-1435. (From Bishir & Southern p.122, and the Gates Co. Historical Society.)

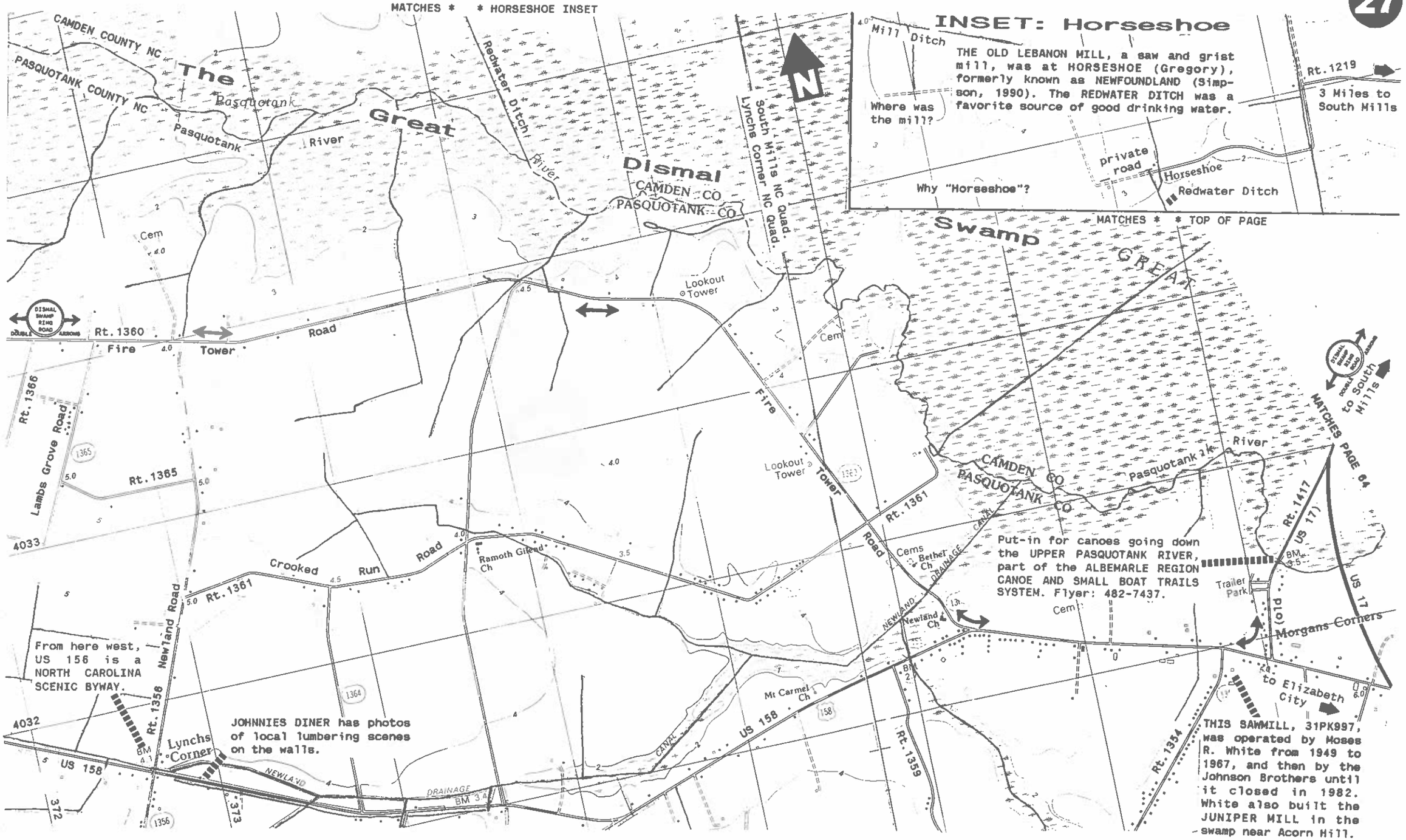
24 CROSS CANAL


ALL GATES COUNTY NC
Probably an old rice field. Was it George Washington's? (Culp)
HAMBURG DITCH (CROSS CANAL)
"THE WHITE OAK MARSH CANAL, which joins the main [Dismal Swamp] canal about six miles from Joyce's creek, has been completed, affording batteaux navigation from the canal into Gates County, in North Carolina, a distance of about nine miles" (7th BPW Report, 1822, p.34). The boats could carry up to 40 barrels (Norfolk HERALD, Sept. 2, 1822). This early canal across the swamp was also known as the CROSS CANAL and the HAMBURG DITCH.
The Great Dismal Swamp
White Oak Spring Marsh (1827 Böye)
A timber railroad ran 510' north of the Cross Canal here (Raynor).
Gate. Not a legal entrance to the GDS National Wildlife Refuge.
A CANAL WAREHOUSE was here at HAMBURG, at the end of the Cross Canal (Daniels). Was it named by German workers brought here by George Washington?
Cedar Works concrete boundary marker "13" (Stallings). Where are other markers in the swamp?
Daniels Road Rt. 1332
DISMAL SWAMP RING ROAD
SUFFOLK
SCARP
GEORGE WASHINGTON DRANK HERE according to legend, at WHITE ROCK SPRING (private)(Daniels)
The postmaster named the town ORAPEAKE but wrote it with such a flourish that the P.O. Department misspelled it as CORAPEAKE (N.C. Gazetteer). In the early 1900's it was known as JONESVILLE (E. Seiling, Gates Co. Hist. Soc.)
Orapeake Creek
Swamp (1827 Böye)
Corapeake VA-NC Quad.
Sunbury NC Quad.
Rt. 1002
Bike 3
HOLLY GROVE
Folly Swamp (Folly Ditch)
Oak Grove Ch
Cem
FOLLY
Rt. 32
Carolina
Thicket Road
POWELL'S MILL, shown here? on the 1809 map, may have been "the Widow Norfleet's Mill on the Orapeake" in 1763 (Berkeley 1976, p.146). In the early 1800s engineers proposed to make the mill pond the summit level of a canal between the Chowan River and tidewater Virginia, but it was never begun.
"BIKE 3" is the "Ports of Call Route" from VA to SC, a part of the NC Bicycle Trail system. Info: NC DOT, (919) 733-2804.
360
359
4038
4037


ALL GATES COUNTY NC
- All Sunbury NC Quad. -
MOSES WHITE'S "JUNIPER MILL" IN THE SWAMP, 1942-1957 (See Simpson, 1990, pp.36-39; THE FORGOTTEN GATES, by Tom Butchko, pp.197-198) at a turnoff on the south side of US 158. The massive brick barrel vault which supported the boiler is still standing in a tin shed. The steam engine for the saw mill and shingle mill was beside it. Juniper logs were brought in from the north on a railway (Gregory) and made into shingles. The brick boiler should be stabilized and preserved as a unique roadside monument to lumbering in the Great Dismal Swamp.
MATCHES PAGE 26
The
Great
Dismal
Swamp
THE WESTERN EDGE OF THE GREAT DISMAL: Millions of years ago, the Suffolk Scarp (or Escarpment) was a beach at the edge of the sea. Since then the sea level has dropped, leaving the crest of the scarp 50-70 feet above sea level, and the toe of the scarp, at the western edge of the Great Dismal Swamp, 30 to 40 feet lower. (E.W. Ramsey et al., VIRGINIA JOURNAL OF SCIENCE 21: 81, 1970).
RR route
US 158 to South Mills
The US 158 CAUSEWAY offers drivers an intimate view of the interior of the Great Dismal Swamp.
THE
SUFFOLK
SCARP
Goose Creek (Goose Neck Creek)
Riddick's Mill (ca. 1809 map), now Acorn Hill Millpond or Jones Pond.
to Rt.32 & Suffolk
Goose
Folly Road
Rt.1002
Bike 3
Cem
Greentown Road
Rt.1336 Light Streak Road
Acorn Hill
Acorn Hill Millpond
How did FOLLY ROAD get its name?
Old Post Road from Charleston to New England
Gravel
? Eason's Mill (ca. 1809 map)
William Byrd's party waited somewhere near here at Thomas Speight's plantation in 1728, while waiting for the IMMORTAL DISHALITES to hack their way through the swamp.
US 158
To Sunbury, Suffolk via Rt.32, Merchant's Millpond State Park, and the Gates County Library.
359
360
4030
4029

26 AIRSTRIP


William Byrd, a staunch Virginian, observed that in North Carolina the men "make their wives rise out of their beds early in the morning at the same time that they lie and snore...Then, after stretching and yawning for half an hour..venture out into the open air...When the weather is mild, they stand leaning with both their arms upon the cornfield fence." (Byrd 1728)
A HEAD OF THE PASQUOTANK MARKER was once located 100 yards upriver of this road, on the Camden-Pasquotank County line (0.85 miles off map). (Stallings)
Insurance Ditch
Old RR Bed (overgrown)
Pasquotank River
N
"Railroads, like hog paths, are being run in every direction." (Arnold, 1888)
Dike Leg
gate
GRADE
Upriver Rd.
Swamp
Dismal
Great
The
Dike Ditch
RAILROAD
Most of the canals in this area were "borrow ditches" formed to make logging railway beds. Along this ditch, the railway ran on pilings along the south side.
Weyerhaeuser Ditch
PASQUOTANK COUNTY NC
GATES COUNTY NC
Rt. 1367
Long
Lane
Rt. 1360
Tadmore Rd.
Tadmore Road, Rt. 1367 (a sandy road, unlabeled)
OLD AIRSTRIP: This road, on an old RR bed, was used during WW II (and into the early 1970s) by planes fighting swamp fires, to keep the smoke from obscuring the region's airfields. (See Simpson, 1990, pp.25-26)
Rt. 1366
"Once destroyed, all the remorseful tears, all the pillars of gold, and all the puny efforts of man can NEVER re-create, imitate, or replace the magnificence of the GREAT DISMAL." (Alvah Duke, SMITHSONIAN, July 1972)
US 158 from Lynch's Corner west to Merchant's Millpond State Park is a North Carolina Scenic Byway, part of the 173-mile LAFAYETTE'S TOUR BYWAY. A book on NC Scenic Byways is available for a suggested $5 donation to the byways program from NCDOT, P.O. Box 25201, Raleigh NC 27611-5201.
The WEYERHAEUSER (or Weyerhauser) DITCH was once a railroad grade.
Lynchs Corner NC Quad.
Sunbury NC Quad.
4035
4034
BM
US 158
MATCHES PAGE 25
DISMAL SWAMP RING ROAD
DOUBLE ARROWS



Put-in for canoes going down the UPPER PASQUOTANK RIVER, part of the ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM. Flyer: 482-7437.

From here west, US 156 is a NORTH CAROLINA SCENIC BYWAY.

JOHNNIES DINER has photos of local lumbering scenes on the walls.

THIS SAWMILL, 31PK997, was operated by Moses R. White from 1949 to 1967, and then by the Johnson Brothers until it closed in 1982. White also built the JUNIPER MILL in the swamp near Acorn Hill.

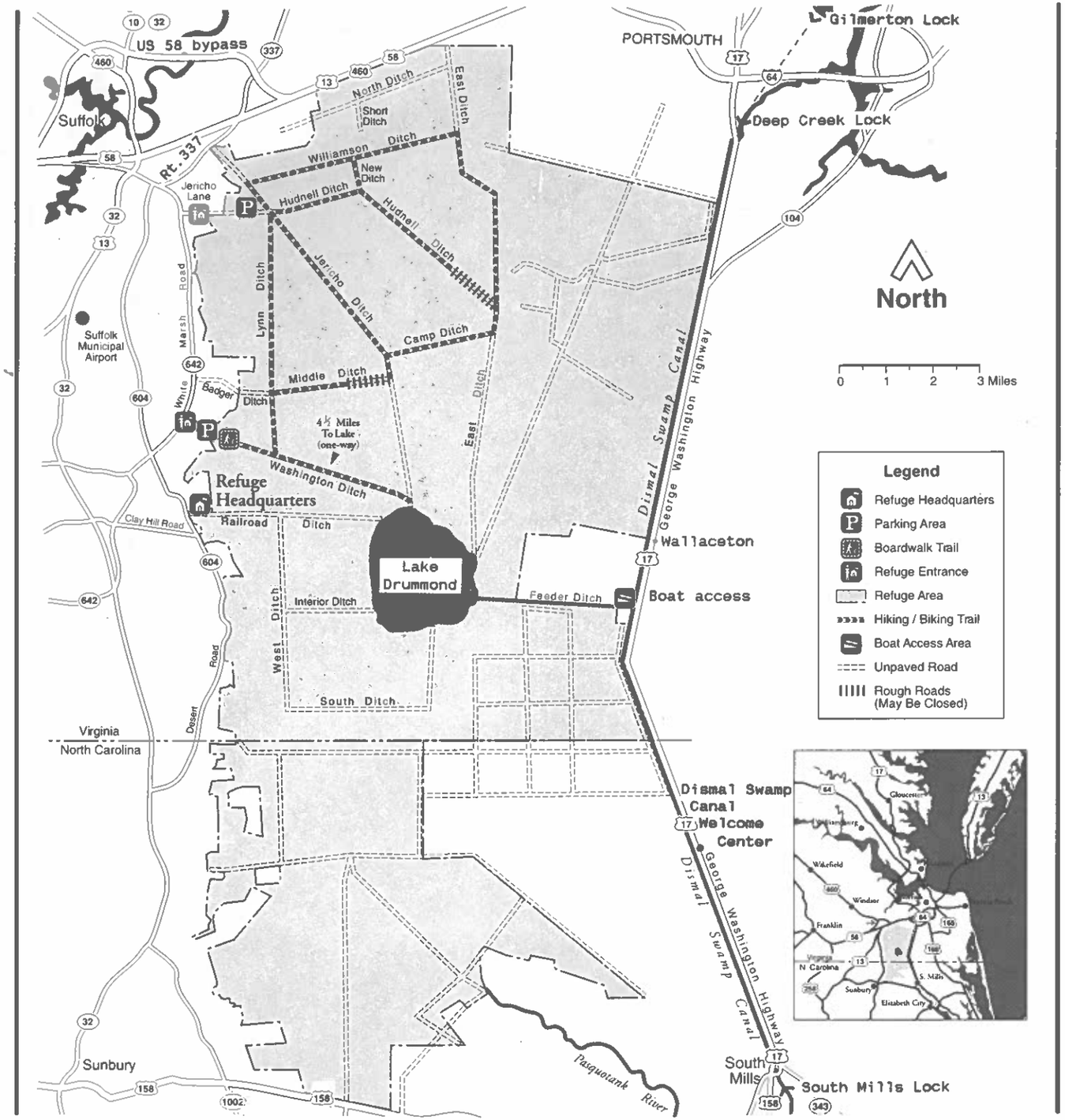
28

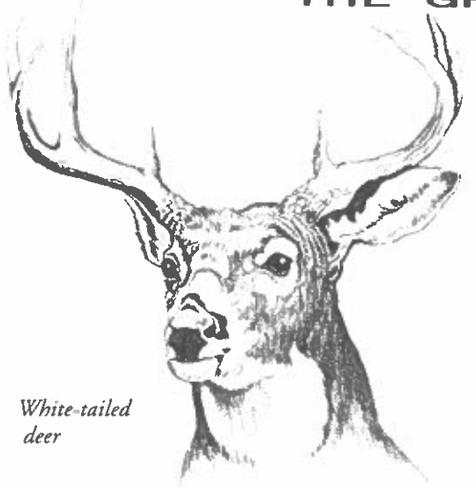
Great Dismal Swamp

From a brochure courtesy of the
Great Dismal Swamp National Wildlife Refuge

U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

GREAT DISMAL SWAMP
National Wildlife Refuge
Virginia • North Carolina





White-tailed deer

© Julien Beauregard

Important Information for Visitors

For the protection of refuge resources and to ensure a safe and enjoyable visit, please familiarize yourself with the following information:

- Refuge trails are open to hiking and biking only. Visitors must stay on designated trails.
- Collecting or harming any plant or animal life is prohibited. For your safety and the animals' protection do not attempt to handle or feed any wildlife.
- The Washington Ditch and Jericho Lane Entrances are open daily April 1–September 30, 6:30 A.M.–8:00 P.M. and October 1–March 31, 6:30 A.M.–5:00 P.M. No overnight use is permitted.

Directions to Refuge

South of Suffolk, VA, on Rt. 13 to Rt. 32, south for 4.5 miles, then follow signs.

Boardwalk Trail: Take White Marsh Road (Rt. 642) to Washington Ditch.

Boat Access: Adjacent to Rt. 17 at Dismal Swamp Canal.

Visitor Opportunities

Visitors to the refuge may participate in a variety of activities including hiking, biking, photography, wildlife observation, and fishing and boating. The refuge was established for the purpose of protecting and managing the swamp's unique ecosystem which includes wildlife and habitat. Therefore, portions of the refuge may be closed to public use activities in order to accomplish this objective.

Biking/Hiking

A variety of unpaved roads provide opportunities for hiking and biking with Washington Ditch Road the best suited for bicycle traffic. The Dismal Town Boardwalk Trail, located on Washington Ditch Road, meanders almost a mile through a representative portion of the swamp.

Fishing/Boating

These activities are permitted year-round on Lake Drummond. A Virginia fishing license is required. Access is via the Feeder Ditch, which connects Lake Drummond with the Dismal Swamp Canal. A public boat ramp is located north of the Feeder Ditch. Boats must be small enough to portage around the water control structure near the lake. The lake is restricted to a 10 mph (or lower) boat motor limit.

Hunting

A white-tailed deer hunt is held during the fall. Permits are required. Portions of the refuge are closed during the fall deer hunt. Additional information is available from the refuge office.

Educational Opportunities

A refuge orientation, film presentations, slide programs and outdoor classroom activities are available to organized school, civic, and professional groups. Advance reservations are required for all programs and may be made by phoning the refuge headquarters. Vehicle access is permitted for research and outdoor classroom groups only.

U.S. Fish and Wildlife Service

Great Dismal Swamp is one of over 500 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service. The National Wildlife Refuge System is a network of lands and waters managed specifically for the protection of wildlife and wildlife habitat and represents the most comprehensive wildlife management program in the world. Units of the system stretch across the United States from northern Alaska to the Florida Keys and include small islands in the Caribbean and South Pacific. The character of the refuges is as diverse as the nation itself.

The Service also manages national fish hatcheries, and provides federal leadership in habitat protection, technical assistance, and the conservation and protection of migratory birds, certain marine mammals and threatened and endangered species.

For further information, please contact:

Refuge Manager
Great Dismal Swamp National Wildlife Refuge
P.O. Box 349
Suffolk, Virginia 23439-0349
Telephone: (757) 986-3705
Monday–Friday, 8:00 A.M.–3:30 P.M., closed all federal holidays

Hard of hearing or deaf visitors may call the Virginia Relay Center at 1-800-828-1120 TDD/1-800-828-1140 voice.

This brochure is available upon request in a large-print version.

DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
March 1996

Description

Great Dismal Swamp National Wildlife Refuge is located in southeastern Virginia and northeastern North Carolina. Creation of the refuge began in 1973 when the Union Camp Corporation donated 49,100 acres of land to The Nature Conservancy. This land was then conveyed to the Department of the Interior, and the refuge was officially established through The Dismal Swamp Act of 1974. The refuge consists of over 107,000 acres of forested wetlands that have been greatly altered by drainage and repeated logging operations. Lake Drummond, a 3,100 acre natural lake, is located in the heart of the swamp.

Red maple

© *Julien Beauregard*

History

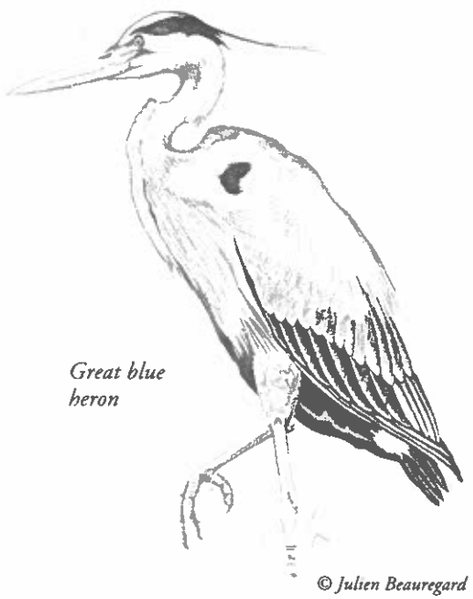
Human occupation of the Great Dismal Swamp began nearly 13,000 years ago. By 1650, few native Americans remained in the area, and European settlers showed little interest in the swamp. In 1665, William Drummond, a governor of North Carolina, discovered the lake which now bears his name. William Byrd II led a surveying party into the swamp to draw a dividing line between Virginia and North Carolina in 1728. George Washington first visited the swamp in 1763 and organized the Dismal Swamp Land Company that was involved in draining and logging portions of the swamp. A five-mile ditch on the west side of the refuge still bears his name. Logging of the swamp proved to be a successful commercial activity, with regular logging operations continuing as late as 1976. The entire swamp has been logged at least once, and many areas have been burned by periodic wildfires. The Great Dismal Swamp has been drastically altered by humans over the past two centuries. Agricultural, commercial, and residential development destroyed much of the swamp, so that the remaining portion within and around the refuge represents less than half of the original size of the swamp. Before the refuge was established, over 140 miles of roads were constructed to provide access to the timber. These roads severely disrupted the swamp's natural hydrology, as the ditches which were dug to provide soil for the road beds drained water from the swamp. The roads also blocked the flow of water across the swamp's surface, flooding some areas of the swamp with stagnant water. The logging operations removed natural stands of cypress and Atlantic white-cedar that were replaced by other forest types, particularly red maple. A drier swamp and the suppression of wildfires, which once cleared the land for seed germination, created environmental conditions that were less favorable to the survival of cypress and cedar stands. As a result, plant and animal diversity decreased.

Resource Management

The primary purpose of the refuge's resource management programs is to restore and maintain the natural biological diversity that existed prior to the human-caused alterations. Essential to the swamp ecosystem are its water resources, native vegetative communities, and varied wildlife species. Water is being conserved and managed by placing water control structures in the ditches. Plant community diversity is being restored and maintained through forest management activities which simulate the ecological effects of wildfires. Wildlife is managed by insuring the presence of required habitats, with hunting used to balance some wildlife populations with available food supplies.

Plant Communities

Five major forest types and three non-forested types of plant communities comprise the swamp vegetation. The forested types include pine, Atlantic white-cedar, maple-blackgum, tupelo-baldcypress, and sweetgum-oak poplar. The non-forested types include a remnant marsh, a sphagnum bog, and an evergreen shrub community. Currently red maple is the most abundant and widely distributed plant community, as it expands into other communities due to the lingering effects of past forest cutting, extensive draining, and the exclusion of forest fires. Tupelo-baldcypress and Atlantic white-cedar, formerly predominant forest types in the swamp, today account for less than 20 percent of the total cover. Three species of plants deserving special mention are the dwarf trillium, silky camellia, and log fern. The dwarf trillium is located in the northwestern section of the swamp and blooms briefly each year for a two-week period in March. Silky camellia is found on hardwood ridges and in the northwestern corner of the refuge. The log fern, one of the rarest American ferns, is more common in the Great Dismal Swamp than anywhere else.



Great blue heron

© *Julien Beauregard*

Birds

Over two hundred species of birds have been identified on the refuge since its establishment; ninety-six of these species have been reported as nesting on or near the refuge. Birding is best during spring migration from April to June

Black bear

© *Julien Beauregard*

when the greatest diversity of species (particularly warblers) occurs. Winter brings massive movements of blackbirds and robins to the swamp. Two southern species, the Swainson's warbler and Wayne's warbler (a race of the Black-throated Green Warbler), are more common in the Great Dismal Swamp than in other coastal locations. Other birds of interest are the wood duck, barred owl, pileated woodpecker, and prothonotary warbler.

Mammals

The swamp supports a variety of mammals including otter, bats, raccoon, mink, grey and red foxes, and grey squirrel. White-tailed deer are common throughout the refuge and, although rarely observed, black bear and bobcat inhabit the area.

Reptiles and Amphibians

The Great Dismal Swamp provides habitat for a variety of reptiles and amphibians. Three species of poisonous snakes—cottonmouth, canebrake rattlesnake, and the more common copperhead—occur here, along with 18 nonpoisonous species. Yellow-bellied and spotted turtles are commonly seen in ditches throughout the refuge. An additional 56 species of turtles, lizards, salamanders, frogs, and toads have been observed on the refuge.

Seasonal Calendar

Winter

Bear cubs (usually two) are born in late January through February. Great horned owls incubate eggs in late January and February. Red-tailed and red-shouldered hawks begin to court and lay eggs. Red maple trees flower in February. Waterfowl migrate with some stopping over on Lake Drummond. Wood ducks pair up and search for nest cavities.

Wood duck

© *Julien Beauregard*

Dwarf trillium

© *Julien Beauregard*

Spring

Dwarf trilliums bloom in mid-March. Wood ducks incubate their eggs in April. Migrating songbirds peak early in May, with warblers being most abundant. White-tailed fawns (usually twins) are born. Occasional ospreys visit the lake. Orchids, coral honeysuckle, yellow jessamine, and yellow poplar are in flower. Cinnamon ferns develop fiddleheads. Silky camellia begin flowering in late May.

Summer

Black bears are active in early June as the breeding season peaks. White-tailed bucks are in velvet. Kingfishers and great blue herons are active along ditches. Trumpet and passion vines bloom. The swamp is usually dry, with fire danger high from June to October.

Fall

Autumn colors peak in late October through November. Large flocks of robins and blackbirds roost in the swamp. Wild fruits such as paw paw, blackgum, devil's walking stick and wild grapes are abundant.

From a brochure courtesy of the Great Dismal Swamp Wildlife Refuge

32 DITCHES IN THE GREAT DISMAL

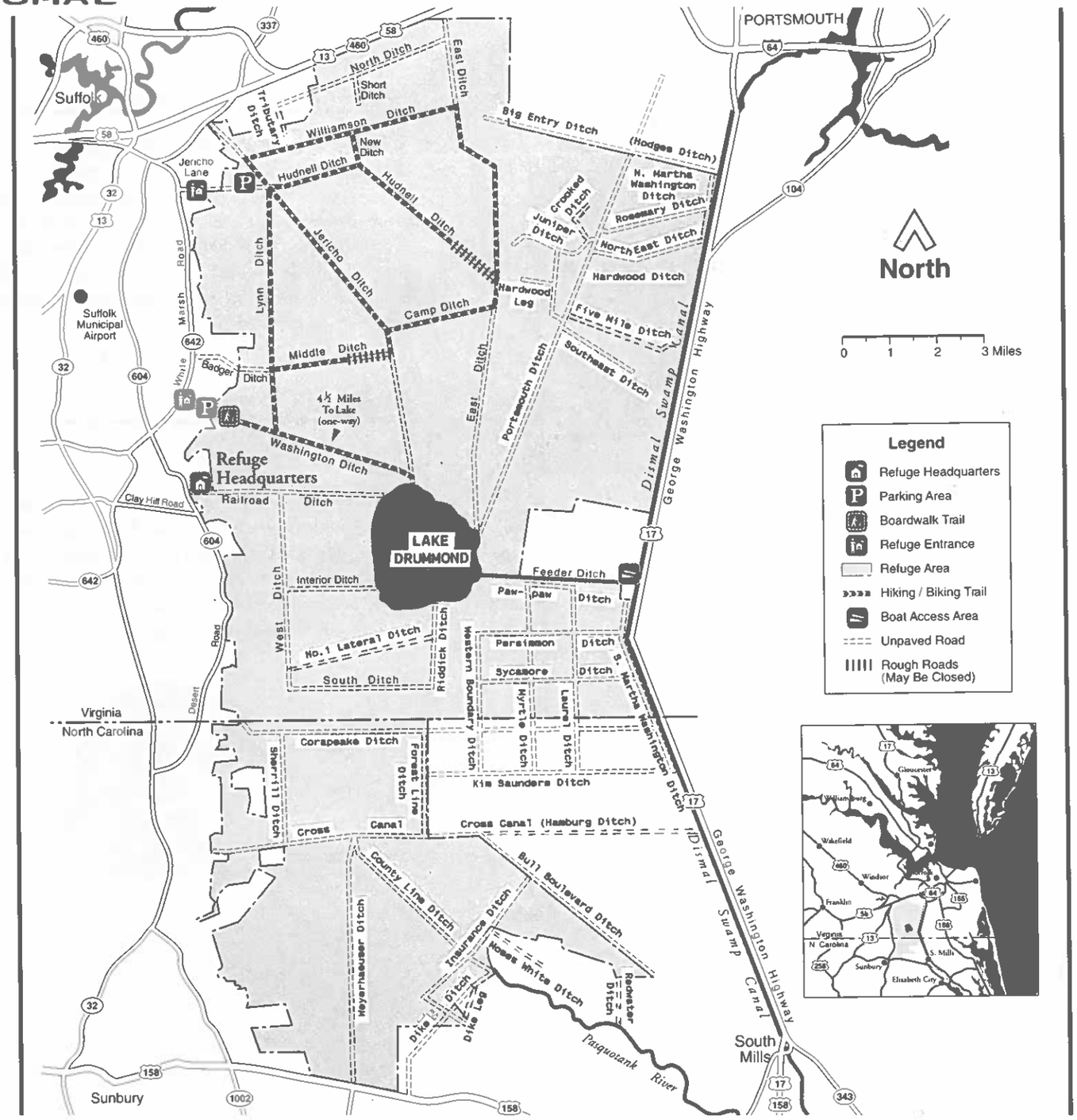
The Great Dismal Swamp is a maze of ditches, hundreds of miles of them. North, south and east of the swamp center, where farmers now till the soil, the huge number and mileage of drainage ditches has probably never been calculated. George Washington's "Adventurers for Draining the Great Dismal Swamp" and those who followed him were all too successful in draining a great deal of the swamp but fortunately for us today the heart of the swamp still remains.

The ditches in the heart of the swamp were dug not just for drainage, but for access to the swamp timber. In the heart of the swamp, within the Dismal Swamp Ring Road, are 51 major ditches with a combined length of 196 miles - 134 miles and 38 ditches in Virginia, and 62 miles and 17 ditches in North Carolina. Four of these ditches are in both states. To these 51 ditches can be added the Dismal Swamp Canal, 22 miles long, the swamp's grand waterway linking North Carolina with Norfolk.

Most of the 51 ditches were built for lumbering in modern times, during the 20th Century; the latest one, the Moses White Ditch, was dug in 1996. The date of construction and the original purpose of each ditch still needs to be worked out as basic Dismal Swamp information.

But of the early, historic ditches we do know a little. The Washington Ditch, dug in the 1760's, was the major waterway into the swamp and Lake Drummond until the Jericho Ditch (or Canal) was opened in 1810. The Riddick Ditch, first opened in 1816, ran south from Lake Drummond, probably to the Cross Canal. All of these were transportation ditches, dug by the Adventurers for Draining the Great Dismal Swamp, later known as the Dismal Swamp Land Company. The Dismal Swamp Canal's Feeder Ditch to the lake was opened in 1812. The Cross Canal, opened in 1822, connected Gates County, North Carolina, with the Dismal Swamp Canal. The Portsmouth Ditch, built in the 1890's from the lake to Portsmouth, was intended to be used for drinking water but for legal reasons, never was. In a long article in the June 29, 1969 Newport News DAILY PRESS (copy courtesy of Union Camp), Alvah Duke considered that only three other ditches were built before 1908: Five Mile Ditch, Big Entry Ditch (Hodges Ditch), and the Tributary Ditch, a drainage ditch for the railroad. All the rest were dug after 1908.

Today most of the 51 ditches are in the Great Dismal Swamp National Wildlife Refuge, and in North Carolina's Dismal Swamp Natural Area. Some of the ditches have roads suitable for hiking and bicycling into the swamp. The lake, via the Feeder Ditch, still supplies water to the Dismal Swamp Canal. Water control structures regulate the water level and flow in the swamp, for wildlife and (except during droughts) for boats on the Dismal Swamp Canal. Two of these structures, at the lake end of the Feeder Ditch and of the Jericho Canal, were locks, designed to raise and lower boats from one water level to another. Did any other ditches, perhaps Riddick's or the Cross Canal, have locks? Nobody knows!



The Adventurers for Draining the Great Dismal Swamp, and their Ditches

The Great Dismal Swamp was not only a barrier to inland navigation along the coast between Virginia and North Carolina; it was also a source (when drained) of rich farmland, and a particularly lucrative source of timber. It was probably for the timber, more than anything else, that the Dismal Swamp Canal was built where it was, straight through the thick of the swamp rather than through the coastal backwaters where the Albemarle & Chesapeake Canal was built half a century later. The swamp today is a maze of canals or "ditches," many of them from early times, dug to provide access to the swamp timber.

THE WASHINGTON DITCH

The first ditch of major significance is now known as the "Washington Ditch" because it was built by the "Adventurers for Draining the Great Dismal Swamp," later known as the Dismal Swamp Land Company,[1] of which George Washington himself was the first manager. According to Stansbury[2] this ditch (but not as popularly supposed, the Dismal Swamp Canal) was in fact surveyed by Washington, working with the company surveyor Gershom Nimmo, sometime between 1763 and 1768. Alexander Brown has proposed that the Washington Ditch may not only be the oldest still usable navigation canal in the United States, but it is probably the first of the hundreds of places to have been named after "The Father of his country" - the first "Washington Monument."[3]

"The Adventurers for Draining the Great Dismal Swamp" was chartered by the Virginia Assembly in January 1764,[4] and one of its first projects was the Washington Ditch. The ditch itself was preceded by a corduroy road or "causeway" shown on Nimmo's 1763 survey of the company's lands.[5] The canal probably dates to the 1760's but the earliest reference to it is an advertisement in the VIRGINIA GAZETTE on November 19, 1772, offering land for sale "along the great ditch in the Dismal Swamp, which abounds with plenty of Cypress timber."[6]

Although the "Adventurers" probably built some canals primarily for drainage purposes (as implied by their title), the Washington Ditch was also designed for boating shingles out of the swamp. It was almost a straight line ten or twelve feet wide, three feet deep, and five miles long, running east from the high grounds south of Suffolk, to the north side of Lake Drummond in the center of the swamp. The ditch must have been a magic highway for the transport of logs and shingles, compared with the earlier corduroy road made of criss-crossed logs laid in the swamp; there were no solid dirt roads even alongside the ditches, as there are now.

The Washington Ditch is now a major historical feature of the Great Dismal Swamp National Wildlife Refuge, and the road beside it is the way to hike or cycle through the swamp to Lake Drummond. Were it not for fallen trees and some low flow control weirs the Washington Ditch could still be navigated today.[7]

THE JERICHO CANAL in 1964, looking north from its junction with the Washington ditch. The lock on the Jericho Canal was probably here at the junction, where a fixed weir is today. If the lock had a wooden floor it may still be intact underground, ready for an archaeological study.

THE JERICHO CANAL

The Dismal Swamp Land Company built a number of other canals through the swamp, for the transport of timber. The best known of these was the Jericho Canal (or Ditch), 12 feet wide, 4 feet deep, and 10 miles long,[8] finished about 1810. This canal became the major lumbering and tourist route into the swamp, replacing the Washington Ditch, because it conveniently connected Lake Drummond directly with Suffolk. At the Suffolk end of the canal was the village of Jericho, where timber and shingles were portaged down to other boats in Shingle Creek, which flows into the Nansemond River and the Chesapeake Bay. The northern half-mile of the canal is now dry, cut off by the Norfolk & Western Railway tracks, but the route can be traced on the Suffolk quadrangle map past John F. Kennedy Middle School to Carver Memorial Park, the site of "Jericho." The rest of the Jericho Canal, south to Lake Drummond, is watered and is a prominent historical feature of the Great Dismal Swamp National Wildlife Refuge.

---

1. It was also known as the Dismal Swamp Company - a completely separate entity from the Dismal Swamp Canal Company.

2. Charles F. Stansbury, THE LAKE OF THE GREAT DISMAL, Albert & Charles Boni Pub. Co., NY, 1925. See also THE HISTORY OF THE DISMAL SWAMP LAND COMPANY OF VIRGINIA, Robert Harding Reid's 1948 Duke Univ. thesis, and Jack H. Reid's unpublished but invaluable REPORT ON DISMAL SWAMP, 19+ pp., Camp Mfg. Co. (1952), VCNS Archives copy courtesy of Mallory Hope Ferrell.

3. THE DISMAL SWAMP CANAL, p.29; see A.C. Brown, "Washington Ditch - the First Monument," Daily Press Sunday NEW DOMINION MAGAZINE, February 18, 1968.

4. An act to enable certain adventurers to drain a large tract of marshy grounds in the counties of Nansemond and Norfolk. Hening's STATUTES, V.8, January 1764, pp.18-19.

5. Illustrated on p.18 of THE DISMAL SWAMP CANAL. Nimmo was also surveyor for Norfolk County.

6. VIRGINIA GAZETTE (Williamsburg) Nov. 19, 1772, p.2, col.3.

7. Brown, DSC, p.29. Unfortunately, the Washington Ditch was redug in the 1950's using a drag line, so it is no longer as it once was.

8. Edmund Ruffin, FARMER'S REGISTER, IV No.9, January 1, 1837, pp.513-521.

34 THE JERICHO CANAL

JERICHO, JERICHO MILLS, AND SHINGLE CREEK

At the north end of the canal, Jericho, its mills, and its docks on Shingle Creek must have been quite an interesting and busy place. The site is uninterpretable today and badly needs an historical and archaeological investigation before all signs of it are gone.

When Latrobe was at Jericho in June 1797 he found an inactive mill already there, the mill pond fed by two streams which were then dry. Part of Latrobe's job was to lay out canals to supply more water to Jericho Mill, and also canals to Smith's (Sheppard's) Mill on the east side of the swamp (perhaps near or on Deep Creek) both owned by the Dismal Swamp Land Company. But he was called away to build the penitentiary in Richmond and never came back.[9] If he had, perhaps Benjamin Henry Latrobe would have been the builder of the Jericho Ditch.

Four years later, in 1801, the company authorized its agent Thomas Swepson to build the Jericho Canal. At the same time the company also resolved "that a new saw mill with two saws and a corn mill of one pair of stones be erected at Jericho as soon as the canal shall be cut far enough to render it effective."[10]

Jericho Ditch was probably open in or by 1810 because a Jericho Mill ledger page survives for that year, and it is clear that shingles are moving down the canal to Jericho. By 1812 the mills at Jericho were "so much decayed that they will not work for six months longer." The company tried to sell the mill in 1815 without success, and instead had it repaired by Mr. Sam Stubbs in 1818 for a grand total of $1552. This included the repair of the mill dam, installing a flood gate 60 feet wide, probably on the Jericho Canal, and another flood gate on the canal leading to the mill.[11]

Perhaps it was the new flood gate which raised the canal level enough to flood out the highway from Portsmouth to Norfolk - presumably now Washington Street, Rt.337. A new bridge for the road had to be built over the canal, probably in 1820.[12]

---

9. VA JOURNALS OF BENJAMIN HENRY LATROBE, pp.236, 364.

10. D.S. Land Co. Records, Duke Univ., 30 June 1801; also in VA JOURNALS OF BENJAMIN HENRY LATROBE, p.236, n.50.

11. D.S. Land Co. Records, Duke Univ., 10 Nov. 1812; 10 June 1815; 11 June 1817; 30 March 1818. Reid, p.61, gives the cost of repairing the mill at $1,650. (Robert H. Reid, "History of the Dismal Swamp Land Company of Virginia," Master's Thesis, Duke University, 1948)

12. Reid (1948), pp.62-63.

Also by 1816 at the Jericho end of the canal was a boat basin and an arch (at the entrance to the mill canal?)[13] and there must have been a portage road down to wharves along Shingle Creek, and warehouses and other buildings.

THE LOCK ON THE JERICHO CANAL

As far as we know, there were no locks at the northern end of the canal to lower boats down to Shingle Creek; the boats must have been unloaded in the canal's boat basin. But we know that there was a lock at the southern end of the canal, which lowered boats perhaps two feet into Lake Drummond. The lock is probably where a fixed control gate is today.

The lock may have been built in 1843 when Joseph Holliday, agent for the Dismal Swamp Land Company, was paid $200 "in part for building a lock for the Canal Co." Perhaps the lock needed emergency repairs when on October 15, 1849, "Tom of Winslow" was paid 3/ for 6 days of work on the lock, and on October 18 he was paid 4/6 for 5 days work, and 3/ for two nights. The company's original receipts are signed with Tom's X at "his mark."

Over the years, writers took voyages to Lake Drummond on the Jericho Ditch, and some mention locks in passing. Robert Arnold, reminiscing in 1888 about a trip in May 1832 remembered that "the gates of the Lock were opened and the skiff shoved in, then the first gate being closed behind us another gate opened. The water rushed in and soon our boat was on a level with the lake."[14] This means that the lock lifted boats UP into the lake, but he may have misremembered, because the control structures now drop the canal into the lake, and Edmund Ruffin in 1861 describes a "regulating lock" which kept the canal high when the lake got lower.[15]

Porte Crayon, writing in the September 1856 issue of HARPER'S NEW MONTHLY MAGAZINE, does not mention going through a lock on the Jericho, but notes that his boat passed lighters carrying sand "to be used in the construction of a water-gate, at the lake terminus of the canal." Stansbury, writing in 1925, refers to the "Jericho locks" as a "primitive dam" at a 2' fall.[16] Such a control structure could have been quite simple, with removable planks to let the boats through - or it could have been more sophisticated, with miter gates, or a drop gate as on the Willis's River. Someday, perhaps, we will find a better description of the Jericho Canal's lock, or find remains of it underground.

On May 1, 1860 Willis S. Riddick, the company's agent, stated in his annual report that "Our ditches, Canals, and Lock and culvert are in good order." But in May 1861 he reported that "Civil war is commenced against our State, by the Federal Government." Next year he lamented that "It is now impossible to employ hands at all. They are all free. Shall I continue to feed negros that will not work? We are in a terrible fix here...what shall I do?"[17]

During the war "the [Dismal Swamp Land Company's] pleasure boat and other boats in the [Jericho] canal were cut up by order of Gen. Peck, commanding the U.S. forces at Suffolk, Va., and carried to the Blackwater river to be used as pontoons across that stream. But I doubt if they were ever used for that purpose."[18]

After the war, Riddick reported that the enemy had willfully cut the mill(?) dam at Jericho, washing away the company's yard. "In addition to the 150$ for putting canal in order it will take at least 600$ to rebuild the dock and repair the culvert & make the yard as it was before + also repair the locks at the lake." The lock must have been repaired, because in 1866 Butler & Hutchens were paid $10.58 "to iron work for locks at Lake Drummond."[19]

The Dismal Swamp Land Company did not last long after the war. The company records stop in 1871 when Baird, Roper & Co. leased the land for timbering, and agreed to keep the Jericho Canal in order.[20] In 1879 the company was dissolved, and in 1899 William Camp bought George Washington's 40,000 acres of the swamp and later added another 9,000 acres, which nearly a century later, in 1972, became the nucleus of the Great Dismal Swamp National Wildlife Refuge.

GONDOLA VOYAGES ON THE JERICHO CANAL

Our most colorful and extensive description of the Jericho Canal, replete with dramatic woodcuts, is by David Hunter Strother of Winchester, writing under the pen name of "Porte Crayon" in the September 1856 issue of HARPER'S NEW MONTHLY MAGAZINE, reprinted in 1959 in THE OLD SOUTH ILLUSTRATED, edited by Cecil D. Eby, Jr. Only a few excerpts from his delightful 15-page article can be reproduced here:

> A basket of provisions, a roll of blankets, and a buffalo robe for bedding, were put upon mine host's buggy wagon, and about ten o'clock A.M., on the 19th, we mounted in person and drove off [from Suffolk] to the canal, two miles distant. Here I found a large covered barge and two stout negroes at my service....The boatmen each took hold of a long pole,

---

17. D.S. Land Co. Records, Duke Univ., May 1, 1860, May 9, 1861, Oct 1, 1862.

18. Arnold, 1888, p.28.

19. D.S. Land Co. Records, Duke Univ., Nov 15, 1866, May 10, 1865, June 1, 1866.

20. D.S. Land Co. Records, Duke Univ., April 6, 1871

13. D.S. Land Co. Records, Nov. 22, 1816.

14. Arnold, THE DISMAL SWAMP AND LAKE DRUMMOND, 1888, p.12.

15. Edmund Ruffin, SKETCHES OF LOWER NORTH CAROLINA, Raleigh 1861, pp.205-208 (Huntington Library).

16. Stansbury, 1925, pp.164, 34.

and by the help of a peg and a withe [a flexible twig such as willow] rigged it horizontally, one to the bow and the other to the stern of the boat, so that the ends projected over the tow-path. They then bore their breasts upon the poles, and with one foot advanced, stood motionless, with eyes fixed upon me as if awaiting a signal. "Forward!" The barge went rippling through the water....

Before I was aware of it I was in the swamp. Lofty trees threw their arching limbs over the canal, clothed to their tops with a gauze-like drapery of tangled vines; walls of matted reeds closed up the view on either side, while thickets of myrtle, green briar, bay, and juniper, hung over the black, narrow canal, until the boat could scarcely find a passage between.... Before and behind the perspective lines ran to a point. The low whispering ripple of the water, and the sullen tramp, tramp, tramp of the bargemen, did not disturb the stillness, but made it seem all the more dreary, like the ticking of an old clock in a deserted house at midnight.... The tow-path now was nothing more than a line of juniper logs, laid along the bank among the grass and reeds.... We were entering on the fourth hour.

The perspective lines were run out at last. We turned a reedy point, and a broad sheet of water lay before us. Ely Reed threw up his hands and cried, "The lake!" Jim Pierce yelled, "The lake! the lake!" "The lake!" I shouted, then quickly relapsed into silence.

Another good description of the Jericho Canal, in the 1850's comes from Edmund Ruffin's SKETCHES OF LOWER NORTH CAROLINA:

The most important and interesting route, for examination, and also for the facility and pleasure of the conveyance, is along the Jericho canal, dug and used for transporting shingles from the interior of the swamp, and the lake, to the landing, at a tidewater creek, near Suffolk, emptying into Nansemond river, where the large sea-vessels are loaded. The canal is closed at the end near the creek, and its level is there more than twenty feet above low tide-water. The canal was dug twelve feet wide, four deep, and is ten miles long to Lake Drummond, and perfectly straight nearly throughout. A regulating lock at the junction with the lake serves to keep the water in the canal at a uniform height, when long droughts may have sunk the water in the lake two feet or more, lower than usual. The canal water is level, from the lake [or from the lock] to the landing; and the water being supplied from the swamp, has a gentle current from the central portion of the canal towards both extremities.

The firm land near the landing, on both sides of the canal, varies from one to two, and for a little space is from three to four feet higher than the swamp surface. The true swamp is soon reached, and from the remaining eight miles or more, along the canal, its margin, formerly a raised bank, is at most, but a few inches higher than the water in the canal, and also the water generally overspreading the neighboring swamp surface. The tow-path, for the men propelling the boat, merely afforded better footing by being trodden and consolidated - and by poles having been laid along for the boat-men to tread upon, where the more depressed surface was covered by water. The peaty earth thrown out of the canal, when it was dug, must have made a broad and high embankment, of which scarcely anything now remains - nearly all having rotted away, and so disappeared...

From the main [Jericho] canal, at different points of departure, there are other branch canals, for smaller boats, and also a "horse-track" with extensive branches, to bring shingles, by boats or carts, from various remote parts of the swamp, to the main canal... The horse-tracks, or paths for the mules, and the carts which they draw, are made of wood laid across the roadway, and so rough that it would seem very difficult for the mules to find footing on them. Yet they draw over them (as I was told) carts loaded as heavily as would be required on ordinary roads. These tracks are made by laying, on the quagmire, long poles parallel and in the longitudinal direction of the route, and on these supports, pieces of split wood, rather longer than the width of a cart track, are laid across, and close to each other, on which the mules walk and draw the carts.

After the war (about 1875-1880) Capt. Busby erected "The Lake Drummond Hotel" near the lake. He built a beautiful "Gondola" to carry customers to it from Suffolk, along the Jericho Canal at two miles an hour. "The Hotel is of the Irish style of architecture, with parlor, kitchen, dining and bedroom all in the same room."[21] The hotel prospered for only one season.[22]

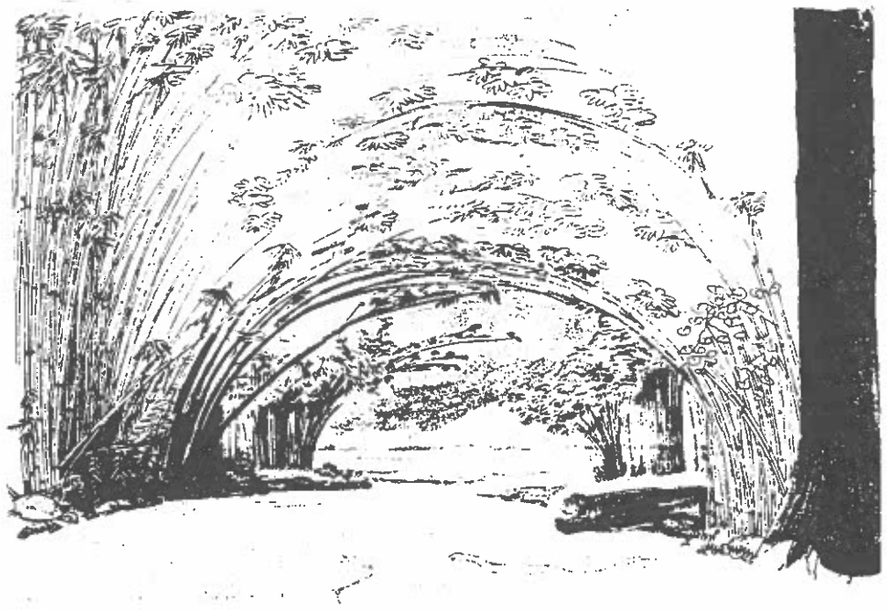
In the later years of the canal a steamboat of sorts called the JENNIE WILSON took passengers from Suffolk to the lake. About 60 feet long and five feet wide, this "peculiarity of swamp navigation" was shaped like a knitting needle with a wheel at one end, a boiler in the middle, and a pole for a rudder. Steaming at 2.5 miles an hour, it took an 1894 tour group from the National Geographic Society to the lake in four hours. A second contingent drove to the Washington Ditch and were poled to the lake, arriving an hour ahead of those on the JENNIE WILSON![23]

---

21. Arnold, 1888, p.29-30.

22. Davis, 1962.

23. Washington EVENING STAR (1894), W.J. Lampton, "In the Great Dismal: A Lamptonesque Description of a Swamp Exploration," Hodges Family Papers, Old Dominion University Archives, Norfolk, VA. (Brought to my attention by Professor Peter Stewart)



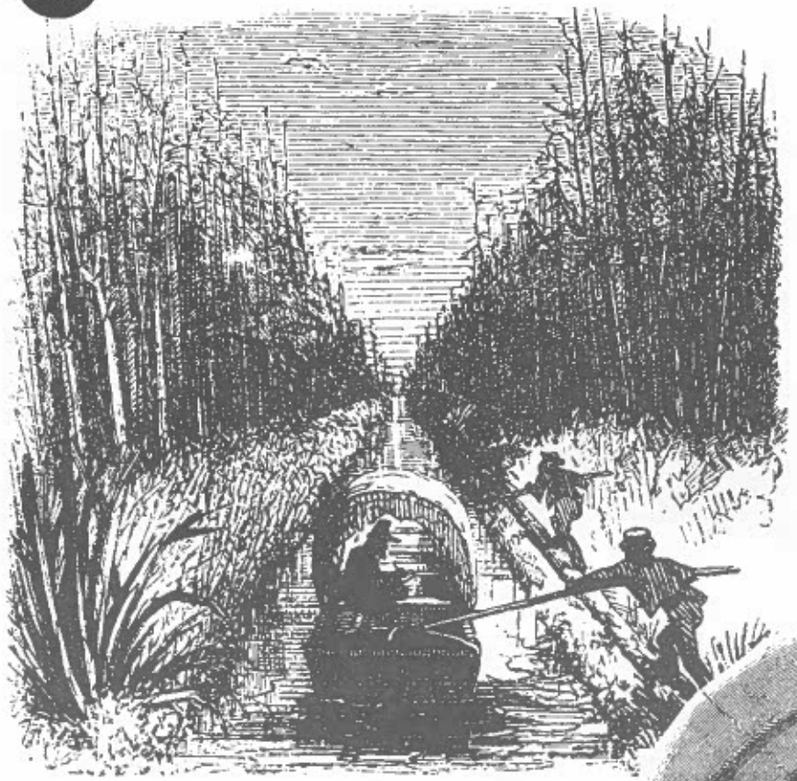
THE WASHINGTON DITCH ENTRANCE TO LAKE DRUMMOND IN 1797

When Benjamin Henry Latrobe followed the Washington Ditch to Lake Drummond in June 1797, the first mile was dry, with a causeway of piled earth to walk on, and the next three miles were so shallow that it took three hours to paddle a canoe through the mud to the lake. But at the end of the canal he was rewarded with this "arch of Canes" offering a magnificent first view of Lake Drummond.

From THE VIRGINIA JOURNALS OF BENJAMIN HENRY LATROBE, edited by Edward C. Carter II, Maryland Historical Society, 1977, p.234 and plate 23. Reproduced courtesy of the Maryland Historical Society.

Lake Drummond still has the magical effect it had a century ago. How an almost circular lake over two miles wide came to be in the center of the swamp has mystified people for two centuries. The most likely explanation at present is that it was not a meteor crater or a UFO landing site, but the result of a fire which burned through the peat about 4,000 years ago, followed by wave action and artesian water upwelling, which generated its present round shape. (D.R. Whitehead, "Developmental and Environmental History of the Dismal Swamp," ECOLOGICAL MONOGRAPHS, V.4, pp.301-315, cited by Kirk, p.168)

PORTE CRAYON'S DISMAL SWAMP GONDOLA



A century and a half ago, DAVID HUNTER STROTHER, writing under the pen name of Porte Crayon, left us these drawings of a Dismal Swamp Gondola on the Jericho Canal, in the September 1856 issue of HARPER'S NEW MONTHLY MAGAZINE.

This is the best (and perhaps only) detailed information which we have about these boats, which carried tourists from Suffolk to Lake Drummond during the 19th century. But Porte Crayon has given us enough detail. Can someone build a replica so we can try it out?

Over 60 replicas of James River Batteaux have been built and navigated by small volunteer groups in Virginia. These are larger and more complex than Dismal Swamp Gondolas, so there is no reason to put off building one to use in the Great Dismal.

BUILD YOUR OWN DISMAL SWAMP GONDOLA

Until someday an original gondola is found preserved in the swamp, Porte Crayon's drawings will do quite well as the basic information for building a Dismal Swamp Gondola. Just as re-enactors have learned to base their persona on a single historic individual, it would surely be best to base a gondola replica soley on Porte Crayon's drawings. His gondola is not the same as the "gundalows" on the Shenandoah (see the Shenandoah River Atlas), and probably not the same as the "Pickle-barrel Boat" discussed in the North West River section of this atlas.

The cut-out model at right is a rough attempt to interpret Porte Crayon's drawings. A larger wooden model made of planks from a hobby shop would be a good start toward properly working out the details of Porte Crayon's Dismal Swamp Gondola.

THE BACK OF PAGE 37 IS BLANK

BUILD YOUR OWN DISMAL SWAMP GONDOLA

37

underside of side bench

C C C C

canopy

underside of side bench

underside of center benches

C C C C

1 cut the outside solid lines

2 fold dashed lines

one foot

A A A A

B B

3 glue sides together A-A

underside of end bench

B B

rib (frame)

floor

underside of end bench

B B

5 fold over end benches

fold up sides & ends & glue end tabs B-B

4

A A A A

A DISMAL SWAMP GONDOLA, FROM THE GREAT DISMAL ATLAS

7 make canopy arch and fold side benches under and glue C-C

attach canopy and benches to the hull with spots of glue

8

6 glue on the outsides of the ends

ends of boat

10 mount Porte Crayon and the polemen

9 fold and glue poles or use shiskabob sticks

c 1997 - Virginia Canals & Navigations Society

The Cross Canal: Gates County's Water Route to Norfolk

In 1822, the Virginia Board of Public Works announced that

> THE WHITE OAK MARSH CANAL, which joins the main [Dismal Swamp] canal about six miles from Joyce's creek, has been completed, affording batteaux navigation from the canal into Gates County, in North Carolina, a distance of about nine miles.[1]

The Norfolk HERALD reported that boats on the canal could carry up to 40 barrels.[2] Arnold, writing in 1888, recalled that

> There is another place of some note that adjoins the Washington farm, it is known as Hamburgs. At this place a ditch or canal was dug, running east to the northwest Lock [actually the Culpepper Lock] of the Dismal Swamp Canal, through which a vast quantity of grain and other produced raised by the farmers of Gates county, was shipped to Norfolk....It was at this place that Beast Butler, of the Federal Army, carried on a very extensive barter trade with the Rebs.[3]

This early canal across the swamp is better known now as the CROSS CANAL or the HAMBURG DITCH. It was also called the WHITE OAK SPRING CANAL,[4] the WHITE OAK SPRING CROSS CANAL,[5] the WHITE OAK MARSH SPRING CANAL,[6] the ORAPEAK CANAL,[7] the ORAPEAKE CANAL and perhaps GOFF'S CUT and the CORAPEAKE LUMBER CANAL.[8]

---

1. 7th BPW Report, 1822, p.34. "Six miles from Joyce's Creek" agrees neatly with the location of what is now called the Cross Canal, which is on modern maps about 10½ miles long.

2. Norfolk HERALD, Sept. 2, 1822. (Emmerson compilation, Mariners Museum)

3. Arnold, 1888, p.33.

4. Pugh and Williams, THE HOTEL IN THE GREAT DISMAL SWAMP, p.82.

5. Gates Co. Deed Book 14: 23 Oct. 1832. The references to Gates County NC Deed Books are from abstracts compiled by Mona Armstrong Taylor, selected for me by Mrs. Edith Seiling of the Gates County Historical Society.

6. VA CALENDAR OF STATE PAPERS, X, 458, Nov.25, 1816.

7. Gates Co. Deed Books, 16 Feb. 1843, 10 Aug. 1846 and 2 Dec. 1853. (Abstracted by Mona Armstrong Taylor)

8. 1868 Report, BPW, p.162. Brown (1970) p.50 mentions "The White Oak Spring Canal, also known as Goffs Cut or the Corapeake Lumber Canal."

According to Frederick B. Sawyer, a stockholder in the White Oak Spring Canal Company (sic), the company was formed about 1805 "for the purpose of cutting a canal and making a road from the Dismal Swamp near the head of the woods in Camden County to the White Oak Spring Marsh in Gates County."[9]

Just as with the Washington and Jericho Canals, the Cross Canal was used not only for transportation, but also for access to the swamp timber. When Edward C. Riddick and his wife deeded property to William T. Parker in 1853, it included "1/3 of the shingles hauled out of the swamp which may now be at the Orapeak Canal, together with lighters, skiffs, mules, carts and gear now owned by the company of Riddick, Norfleet & Riddick."[10]

References to this important canal are scarce and confusing.[11] Why did it have so many names? In the literature it is frequently confused with the CORAPEAKE CANAL, a modern logging ditch built probably in the 1950's three miles north, along the state line. But the numerous names agree with the numerous place names at the western terminus of the Cross Canal, in Gates County.[12] The canal began in Orapeake (or Orapeak) Swamp, and at the mouth of the swamp was the White Oak Spring(s) Marsh. The town or camp which sprang up at this terminus was called "Hamburg" or "Hamburgs."[13] Was Hamburg named by German workers which George Washington planned to bring here to work his farm?

Today the Gates County entrance to the Cross Canal, on Daniels Road, is still impressive. Only fallen trees block its use for navigation. Could this end of it be opened for guided swamp tours in a gondola, as an historic Gates County attraction?

---

9. Pugh and Williams, p.82. Did the company have an act of incorporation, with more details?

10. Gates Co. Deed Book, 2 Dec. 1853. Paraphrased from abstract by Mona Armstrong Taylor.

11. Harrell, p.36, says that in the early 1850s local men, notably Col. Robert R. Hill, Samuel Harrell and Timothy Lassiter built a ditch from Hamburg to the Washington Ditch, so that Gates County boats could at last have a route through the Dismal Swamp to Norfolk, via Lake Drummond. There does not seem to have been such a canal. Was it the Cross Canal which these men built, in 1805-1822?

12. See page 24 of this atlas. Future researchers should try to identify the swamp's canals on maps, as they come across references to them, to reduce the confusion. It does not help that early records of the Dismal Swamp Land Company refer to the Feeder Ditch as the "Cross Canal"! (Duke Univ., Dismal Swamp Land Co. Records, Reel 21, various letters in 1812)

13. A very brief survey of Hamburg is in archaeological reports for sites 31GA12 and 31GA14. (NC State Historic Preservation Office, Raleigh)

The other, east, end of the Cross Canal is 10½ miles away on the Dismal Swamp Canal near the Welcome Center. Today this part of the canal is much overgrown, hard to spot from the air, and no road has been built along it. Perhaps this end of it was closed off when the Dismal Swamp Canal level was lowered in the 1890's, leaving the end of the Cross Canal high and dry. Could that part of the Cross Canal be the only early navigation canal in the swamp which has remained relatively untouched since it was built? Could part of it be carefully opened again, for historic nature tours into the swamp from the Dismal Swamp Canal Welcome Center?

THE LAKE DRUMMOND AND ORAPEAKE CANAL: GATES COUNTY'S CANAL THAT NEVER WAS

An undated map in the Library of Virginia, probably dating from 1809, shows two proposed canals which together would have connected the Roanoke River with the Norfolk area, through Gates County. The "Upper Canal" was to begin above the falls of the Roanoke at present-day Roanoke Rapids and run to Murfreesboro on the Meherrin River. From there boats could go down the Meherrin, down the Chowan, then up Bennetts (or Bennet's) Creek past Gatesville, originally known as Bennett's Creek Landing, to the present site of Merchants Millpond State Park. From there, the "Lower Canal" was to run to Powell's Mill Pond near the present town of Corapeake and then north along the Suffolk Scarp (on the west side of the Dismal Swamp) to Suffolk. The Cross Canal through the Dismal Swamp, and Merchants Millpond, are not shown on this map because they were built after 1809.

The map shows two possible routes for the proposed Lower Canal. One of them would have run up Bennett's Creek through Merchants Millpond State Park.

MERCHANTS MILLPOND: ALMOST A NAVIGABLE WATERWAY

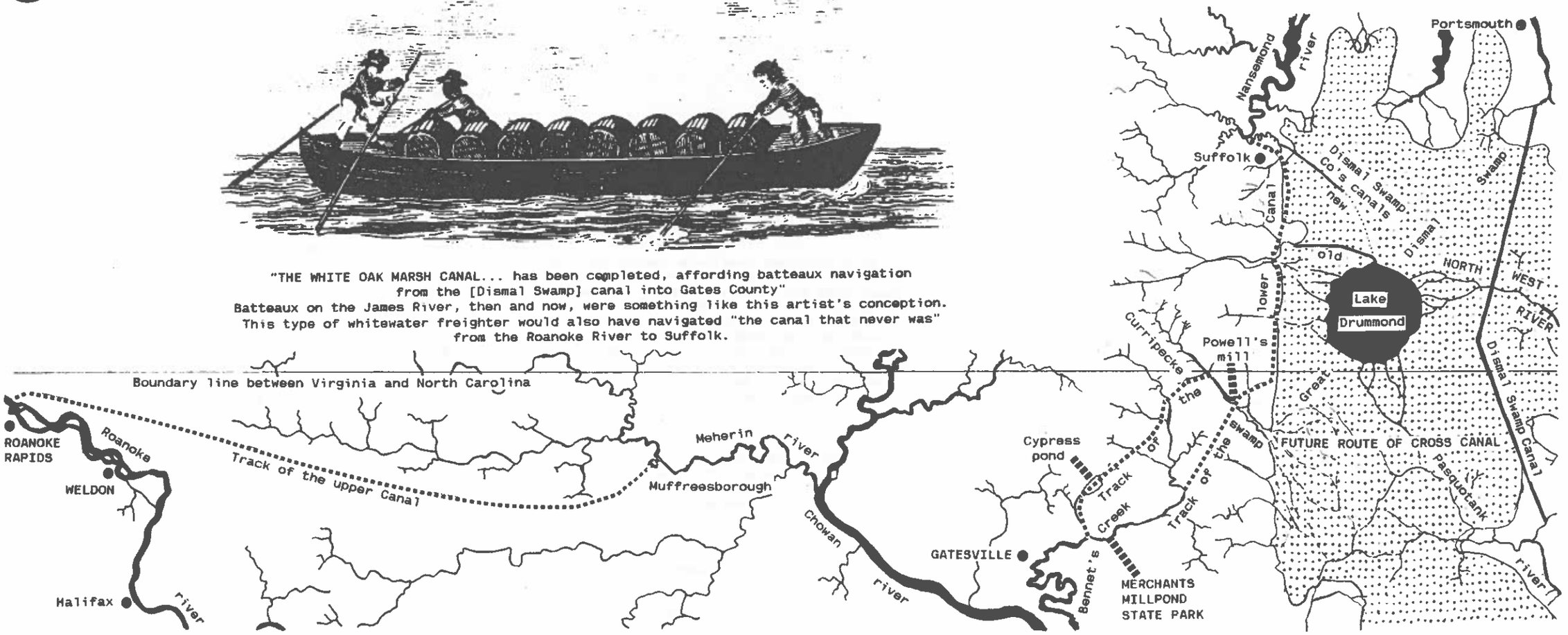
The millpond is not shown on the ca.1809 map because the first mill and dam were not built until about 1811, by Kincken Norfleet, when it was known as Norfleet's Mill.[14] If the canal scheme had gone through then, Mr. Norfleet would probably have been required to build a canal lock in his mill dam. And being right on a navigable waterway between the Roanoke River and the Norfolk area he might have had a really booming business. We know that Bennett's Creek was probably already navigable up to the mill because laws were passed forbidding the felling of trees across the creek below Nor-

---

14. "Merchants Millpond State Park, 400 B.C. - 1950 A.D., a brief history of its land and people," by Mary Belden, with material from Dr. David S. Phelps of ECU. Eight-page ms courtesy of park ranger Dennis Helms. A copy is also in the Gates County Library. For more about Bennetts Creek and its future see Mathis & Phelps, "A preliminary cultural resources management plan for Bennett's Creek..." (NC Dept. of Natural Resources & Community Development, 1978).

40 THE CANAL THAT NEVER WAS

"THE WHITE OAK MARSH CANAL... has been completed, affording batteaux navigation from the [Dismal Swamp] canal into Gates County"
Batteaux on the James River, then and now, were something like this artist's conception. This type of whitewater freighter would also have navigated "the canal that never was" from the Roanoke River to Suffolk.



Part of a map probably dating from about 1809, showing the two canals proposed to link the Roanoke River valley with Suffolk and Tidewater Virginia. Two possibilities are shown for the "Track of the lower Canal" at what is now Merchant's Millpond State Park. Annotations in small letters are spelled as on the 1809 map; modern names are in capitals. Neither the Upper nor Lower Canal was ever begun.

Redrawn from "A sketch of the Country through which it is contemplated to cut two Canals, forming a communication between Roanoke river above the falls and Meherin [sic] river at Muffreesborough [sic], and between the tide water in Bennet's [sic] creek and Nansemond river at Suffolk," a map in the Library of Virginia. The map is undated but it was probably made about 1809 because the "Dismal Swamp [Land] Company's new canal" (the Jericho Canal), opened in 1810, is shown still under construction. The Dismal Swamp Canal, first opened in 1805, is shown. The Feeder Ditch, dug in 1812, is not shown, nor is the Cross Canal, opened in 1822.

fleet's Mill, which would block navigation.[15]

Even though the canal was never begun, by 1908 the mill, then known as "Merchants Mill," was Gates County's largest, and its chief trade center. The mill stopped operating shortly before World War II. In 1973 A.B. Coleman donated the millpond to the North Carolina Division of Parks and Recreation, and it became the centerpiece of Merchants Millpond State Park.

Today canoeists can paddle up the pond to picturesque canoe camp sites.[16] Only a few concrete remnants of the mill foundations remain, near the dam crossed by Rt.1400. This is the place to try to imagine what life was like when the mill was booming a century ago, and what might have been if, two centuries ago, a canal had made Bennett's Creek part a busy commercial waterway between the Roanoke River Valley and Norfolk.

THE LAKE DRUMMOND AND ORAPEAKE CANAL

But interest in a canal through Gates County did not stop in 1809. In 1811-12 The North Carolina and Virginia legislatures passed acts to incorporate a company to cut a canal from the Roanoke to the James or to the Dismal Swamp Canal.[17]

The Commissioners appointed by the acts recommended the same route as shown on the 1809 map, except that the Lower Canal would run from Bennett's Creek north only to "the west end of the White oak marsh Spring Canal; thence along said canal to the Dismal Swamp Canal, and thence to Norfolk." The Lower Canal would be supplied with water from Powell's Mill Pond, which would be even better supplied with water if it could be moved a mile downstream to the White Oak Marsh Spring. The 1809 map shows Powell's Mill on Orapeake Swamp probably at the Carolina Road (Rt.32), so a mile downstream would be at Daniels Road where the Cross Canal begins now.

The Commissioners were enthusiastic about the proposed canal, which would open up the Roanoke River valley, exclaiming "That so great and noble a River, watering such an extensive and fertile country, should be of no use for the conveyance of Produce to market is the bitterest sarcasm that can be pronounced upon the industry and enterprize of those who are interested in rendering it navigable."[18]

We know that in December 1812 (perhaps in response to the acts of 1811-12) the Dismal Swamp Land Company was involved in making a survey "for the Contemplated Canal from Bennets[sic] Creek to Suffolk."[19] This was the company which built the Washington and Jericho Ditches to Lake Drummond, and ran George Washington's plantation at the Orapeake Swamp. Perhaps the company owned the land along the edge of the swamp, through which the contemplated canal was to go.

Interest in a Gates County canal was renewed in 1829 when the General Assembly of North Carolina passed "an act to incorporate the Lake Drummond and Orapeake Canal Company,"[20] and Virginia passed a similar act the next year.[21] The canal was to run from Lake Drummond to the south side of Orapeake Swamp, be 16 feet wide and 5 feet deep, and have locks if necessary. Does this mean that the White Oak Marsh Canal (the Cross Canal), built in 1822, was not satisfactory? The Cross Canal also began at the Orapeake Swamp, but it ran straight east to the Dismal Swamp Canal, not through Lake Drummond.

North Carolina amended the 1829 act in 1830/31 and 1831/32 to permit the company to extend the canal to Bennett's Creek. Virginia passed a similar amendment in 1832,[22] and the May 23, 1833 Norfolk BEACON[23] announced that subscription books for stock in the company were now open in Virginia. The canal was to be 14 miles long, 16' wide, and 3' deep, running from Bennett's Creek to Lake Drummond through Orapeake Swamp. The canal would allow boats from the Meherrin, Nottoway and Blackwater rivers, and from the headwaters of the Chowan, to avoid the dangers of Albemarle Sound, and it would turn the headwaters of the Pasquotank (meaning Orapeake Swamp, dammed up by Powell's Mill Dam?) into Lake Drummond.

But probably no spadework actually began for these visionary schemes. Harrell, in "Gates County to 1860" describes in detail the local politics which prevented any action on the proposed canal. The act was revived by North Carolina in 1844 but as far as we know nothing was ever done. At that time Virginia's Board of Public Works was also still interested in the canal through Bennett's Creek, as well as the old "Upper Canal" from the falls of the Roanoke to Murfreesboro.[24]

In 1868 the Board proposed to extend the Orapeake Canal to "Redecksville on the Chowan."[25] Now spelled "Riddicksville," this town is just south of the Virginia line so the proposed canal would have been about 20 miles long, roughly following the state line.

A look at a North Carolina map makes it clear why there was so much interest for so many years in canals connecting the Roanoke River and the Chowan with Norfolk or Suffolk. These rivers flow into Albemarle Sound, which had no good outlet to the Atlantic. The Dismal Swamp Canal was designed to bring this trade to Norfolk. But the whitewater freight boats, called batteaux, which brought produce down these rivers, could not navigate across dangerous Albemarle Sound to reach the canal, and had to unload into sailing ships and steamboats. The proposed canals would have allowed batteaux to reach Norfolk from the Roanoke and Chowan.[26]

For Gates County, the situation was especially frustrating. Gates is just across the swamp from the Dismal Swamp Canal to Norfolk, but over a hundred miles away via the Chowan and Albemarle Sound. The 10½-mile Cross Canal, opened in 1822, was Gates' shortcut to Norfolk. Another ten miles of canal to Bennett's Creek, and seven more miles of improvement along the creek to the forks, at today's Merchant's Millpond, would have opened up the Chowan River to Norfolk, and that canal in turn might have led to the building of another canal to tap the enormous Roanoke River valley. All of the boats would have travelled through Gates County. But it never happened.

(Many thanks to Mrs. Edith Seiling of the Gates County Historical Society, and to Pat Familar of the Gates County Public Library, for help with this section.)

---

15. Harrell, pp.34-36, in THE HISTORY OF GATES COUNTY, by Isaac S. Harrell, comprising "Gates County to 1860" by Isaac S. Harrell (see pp.34-37) and "The History of Gates County," by W.E. McClenny (see p.43). (Gates Co. Arts Council Bicentennial Committee, Gatesville, 1976) In Gates County Public Library. For sale by the Gates County Historical Society, c/o Mrs. Edith Seiling, Box 98, Gates, NC 27937.

16. A brochure with a map of the park is available from Merchants Millpond State Park, Rt.1, Box 141A, Gatesville, NC 27938, 919-357-1191.

17. "An act to incorporate a company for the purpose of cutting a navigable canal from Roanoke to Meherrin River, and from the waters of Chowan River, in North Carolina, to some of the waters of James River, in Virginia, or to the Dismal Swamp Canal." VA CALENDAR OF STATE PAPERS, X, 457-460, Nov. 25, 1816.

18. VA CALENDAR OF STATE PAPERS, X, pp.459-460, Nov. 25, 1816. The editor of these papers noted that the report has no date but was found with those of 1816.

19. Duke Univ., Dismal Swamp Land Co. Records, Reel 21, letter dated 15 December 1812. These records were microfilmed by Univ. Pubs. of America, ca.1991, with a printed guidebook, SLAVERY IN ANTE-BELLUM SOUTHERN INDUSTRIES. (LVA)

20. Harrell, p.36.

21. VA Acts of Assembly, 1829/30, pp.47-54.

22. Acts of Assembly, 1831/1832, pp.110-111.

23. Emmerson compilations, Mariners Museum.

24. BPW report 1845, p.24.

25. BPW report, 1868.

26. On a very rough sketch dated 19 December 1803, Latrobe proposed a canal from Norfolk to the Chowan (mislabeled Choptank), vaguely along the Bennett's Creek route, noting that he had objections to the Dismal Swamp Canal "Because the entrance at Pasquotank is too near the ocean & that vessels or boats coming from Roanoke or the bottom of Albemarle Bay are very much exposed to bad weather accidents." (THE ENGINEERING DRAWINGS OF BENJAMIN HENRY LATROBE, Darwin H. Stapleton, ed., Yale Univ. Press, 1980, p.138)

42 LOGGING IN THE GREAT DISMAL

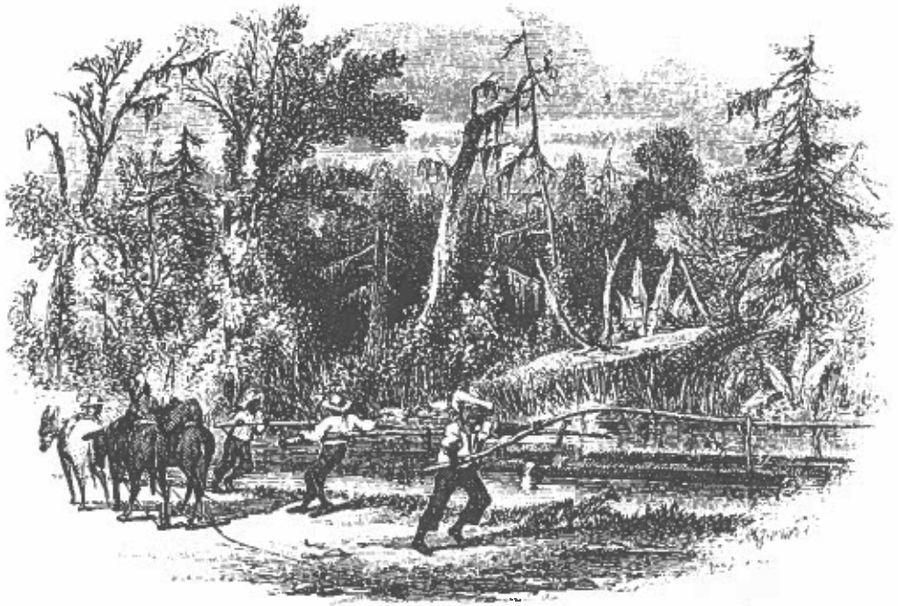
A Shingle Camp in the Swamp in 1856

Even before time of the "Adventurers to Drain the Great Dismal Swamp" in the 1760s the swamp has been a source of lumber and shingles, and across the centuries most of it has been logged over, sometimes two or three times. When "Porte Crayon" visited the swamp in 1856 he rode a "gondola" along the Jericho Ditch from Suffolk to Lake Drummond, and sketched this shingle camp, "A group of picturesque sheds [which] afford accomodation for a number of men and mules."

Carting Shingles to the Jericho Canal

"From the [boat] landing a road, or causeway of logs, leads back into the Swamp... a distant rumble advised me of the approach of the shingle-carts. These presently passed, seven in number, loaded high with shingles, and each attended by a boy on foot. When they discharged their cargoes at the landing, the boys mounted the carts and returned at a brisker pace... I was informed that a horse had never been seen there - mules being the only animals proper for this particular service."

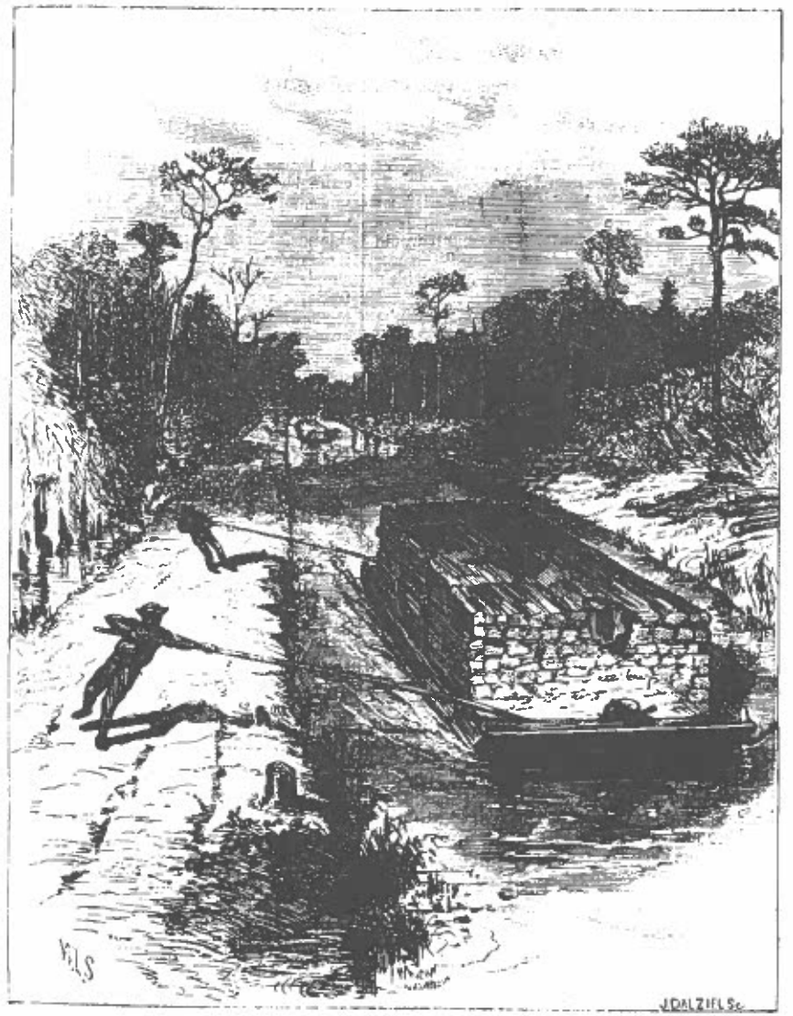
Drawings and quotations from "The Dismal Swamp" by Porte Crayon in the September 1856 issue of HARPER'S NEW MONTHLY MAGAZINE



DISMAL SWAMP CANAL.

The navigable canals in the swamp, such as the Washington Ditch, Jericho Canal, Cross Canal, the Dismal Swamp Canal, the North West Canal, and probably the Riddick Ditch, were used to float out logs to sawmills, and to transport flat-bottomed barges called "shingle flats" loaded with thousands of shingles - and on the Jericho Canal, transporting Dismal Swamp Gondolas loaded with tourists. Even on the Dismal Swamp Canal, which had a good towpath, a common method of propulsion was "tracking" - with a man at the bow and at the stern, as in these drawings. The drawing above, of two men tracking logs on the Dismal Swamp Canal, is from "Loungings in the Footprints of the Pioneers" in the May 1860 issue of HARPER'S NEW MONTHLY MAGAZINE. The drawing at right, also of the Dismal Swamp Canal, is from the June 14, 1873 issue of HARPER'S WEEKLY.

Tracking was also the method used by batteaux on canals elsewhere in Virginia and throughout the south. These white-water freight boats navigated down river, and when they came to a canal, the men got out and attached a setting-pole to bow and stern as in these drawings.



TRACKING A BOAT-LOAD OF RAILROAD TIES.

44 RAILROADS IN THE SWAMP

MAJOR THROUGH RAILROADS IN THE SWAMP

West Side of the Swamp

1 THE PORTSMOUTH AND ROANOKE RAILROAD. the first in the swamp, was the railway version of the Dismal Swamp Canal, connecting Albemarle Sound with Chesapeake Bay and the Norfolk region. It was 75 miles long, from Weldon, North Carolina on the Roanoke River, to Portsmouth on the Elizabeth River, with steamboat connections at both ends.

The company was incorporated in 1832-1833. In 1834 when the first section was finished through the swamp from Portsmouth to Suffolk, the first train was drawn by horses. This part of the line was raised six or seven feet above the swamp on pilings; the rails were iron straps laid on long timbers. The rest of the line, to Weldon, was completed in 1836.

The North Carolina part of the line was sold in 1843. the Virginia part, sold in 1846, became the SEABOARD & ROANOKE RAILROAD COMPANY, which in 1911 was in turn sold to the SEABOARD AIR LINE RAILWAY. In 1967 Seaboard merged with the Atlantic Coast Line to form the SEABOARD COASTLINE RAILROAD COMPANY, which is now part of CSX. (Berkeley, 1976, pp.162-163)

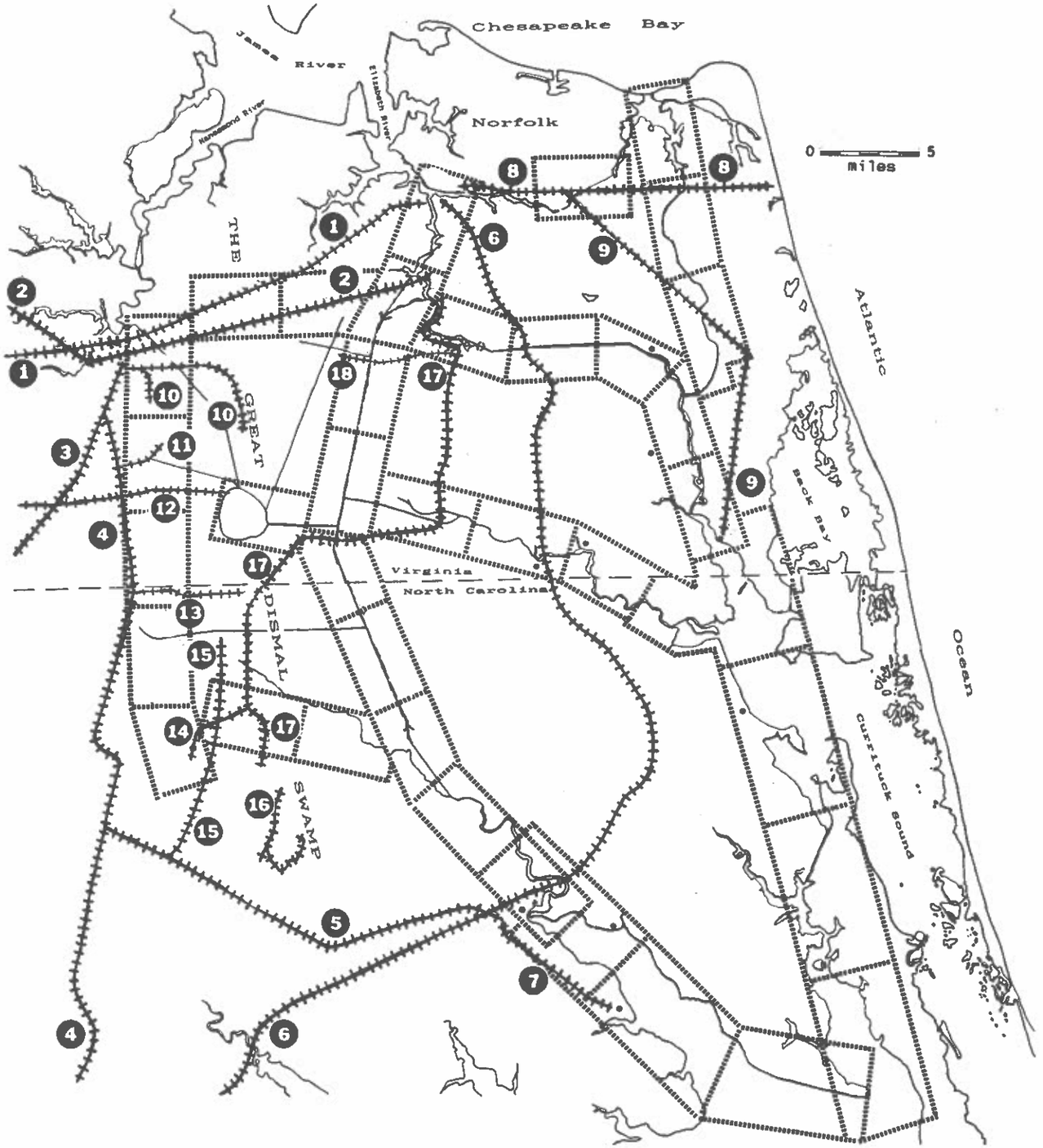
2 THE NORFOLK & PETERSBURG RAILROAD, chartered in 1851 and built in 1854-1858, came next. The engineer in charge of construction was William Mahone, a VMI graduate, who in 1857 became the company president and developed it into the ATLANTIC, MISSISSIPPI & OHIO RAILROAD in 1867 and the NORFOLK & WESTERN RAILWAY in 1882. It is now part of NORFOLK SOUTHERN.

Ten miles of the line crossed the Great Dismal, a mile south of the Portsmouth & Roanoke RR line. Instead of putting the line on pilings, Mahone cut the swamp trees along the route so that they fell across the intended line like a corduroy road, and upon this base he piled up an earth embankment which is still in good condition today.

During the War Between the States General Mahone used his line to re-capture the Gosport Navy Yard from the Yankees. He sent a steam engine toward the Yard, furiously blowing its whistle and ringing its bell to make the Federals think that a fleet of Confederate troop trains was arriving - and it worked! (Berkeley, 1976, pp.163-166)

3 THE SUFFOLK LUMBER RAILROAD was a narrow gauge (42") line built by the Suffolk Lumber Co. in 1874, from Suffolk through Whaleyville VA to swamp timber near Asher, NC. It was one of the first to use telephone dispatching of its trains, even before the first telephones were installed in Suffolk in 1888. In 1884 it became the Whaleyville Lumber & RR Co. In 1889 parts of the line were used by the NORFOLK & CAROLINA RR (later ACL, then SCL and CSX). (M.H. Ferrell) See Arnold, 1888, pp.43-44.

4 THE SUFFOLK & CAROLINA ("Suffolk and Caroline") RAILWAY was a 42" narrow gauge line (later standard gauge) begun in 1873 by the Nansemond Land, Lumber & RR Co. to bring farm products and lumber from North Carolina to Suffolk. In 1884 it became the S&C and was extended to Montrose Landing on the Chowan River, then to Edenton. In 1905 it became the VIRGINIA & CAROLINA COAST RR, and in 1907 the NORFOLK & SOUTHERN (not the same as today's Norfolk Southern). The line was abandoned in 1938. (M.H. Ferrell) The DeLorme NC Atlas shows the trace via Corapeake and Sunbury to the Chowan River near Welch. See also the 1896 A. von Haake " "Post Route Map" of N&S Carolina.



East Side of the Swamp

6 The ELIZABETH CITY & NORFOLK RAILROAD was completed in 1880-1881. Originally intended to end in Elizabeth City, it continued south to docks on Albemarle Sound at Edenton, 73 rail miles from Norfolk. The line is still active today, passing through Fentress, Northwest, Moyock, Camden, Elizabeth City and Hertford to Edenton. In 1883 it became part of the NORFOLK & SOUTHERN RAILROAD and later the SOUTHERN RY, which merged in 1982 with NORFOLK & WESTERN to form NORFOLK SOUTHERN. Now operated by the CHESAPEAKE & ALBEMARLE R.R.

7 A branch still runs from Elizabeth City to the blimp hanger.

8 THE NORFOLK, VIRGINIA BEACH AND SOUTHERN RAILROAD had a main line from Norfolk to Virginia Beach, beside present routes 44 and 58. It began in 1882 as a narrow gauge (36"), the NORFOLK & VIRGINIA BEACH RR. is still in operation as part of NORFOLK SOUTHERN.

9 Its Munden Point Branch, completed in 1896, ran for 29 miles from Euclid down to the extensive wharves at Munden Point on the North Landing River. Here boats from Currituck and Albemarle Sound offloaded their perishable goods such as ducks, to be whisked to Norfolk and its ports. The ducks were in barrels, arranged in a circle around the center, which was filled with ice. The Munden Point (or Currituck) Branch was taken up in 1943.

THE SWAMP'S LOGGING RAILROADS

This map shows only a few of the logging railroads which over the years penetrated nearly every acre of the swamp. They are all gone now, leaving few traces on the ground and few if any records. The best source of information is "Railroads of the Great Dismal Swamp," Mallory Hope Ferrell's map reproduced in this atlas. An ongoing research project, it shows (so far) 36 swamp railroads. Those who hope to understand the historical ecology of the swamp would do well to work out, on large-scale maps, where and when these railroads were built - a good Ph.D. thesis project!

West Side of the Swamp

10 RR line shown on the 1919 USGS 15' Suffolk and Dismal Swamp topos (LVA), perhaps to lands cut by Press Brinkley prior to 1895 (Old cuttings map). The west part of the line ran along what is now Jericho Ditch Lane. In 1934 the CAMP MANUFACTURING COMPANY (now Union Camp) built a line into the swamp from Camp #7, at the east end of Jericho Ditch Lane (See Simpson, pp.53-56 and Old cuttings map). In 1938 Camp #7 moved south to the Railroad Ditch.

11 Claude Howell's 1895 RR, for the Roper Lumber Co. (Old cuttings map)

12 The RAILROAD DITCH line, from Camp Co.'s 1938 Camp #7 into the swamp. The Railroad Ditch was probably a "borrow pit" created when the ridge of earth for the railway (now a road) was dug from the swamp. The tracks, but not the ditch, extended to the edge of Lake Drummond to provide the steam engine with water (Raynor).

13 Ferrell's map shows four RR lines over the years using the grade along the CORAPEAKE DITCH, just south of the state line.

14 MOSES WHITE'S RAILROAD LINE, visible on a 1973 aerial photo, to Moses White's Juniper Mill (GDSNWR files).

15 "Old Railroad grade" along WEYERHAEUSER DITCH, shown on the 1981-82 USGS 7+' topo maps. Probably part of the DISMAL SWAMP RAILROAD.

16 An interesting logging railroad to a sawmill near Lynchs Corner, shown on the 1940 South Mills 15' topo map. Ferrell's map shows it as the Farmers Mfg. Co. line, ca.1917-1928.

East Side of the Swamp

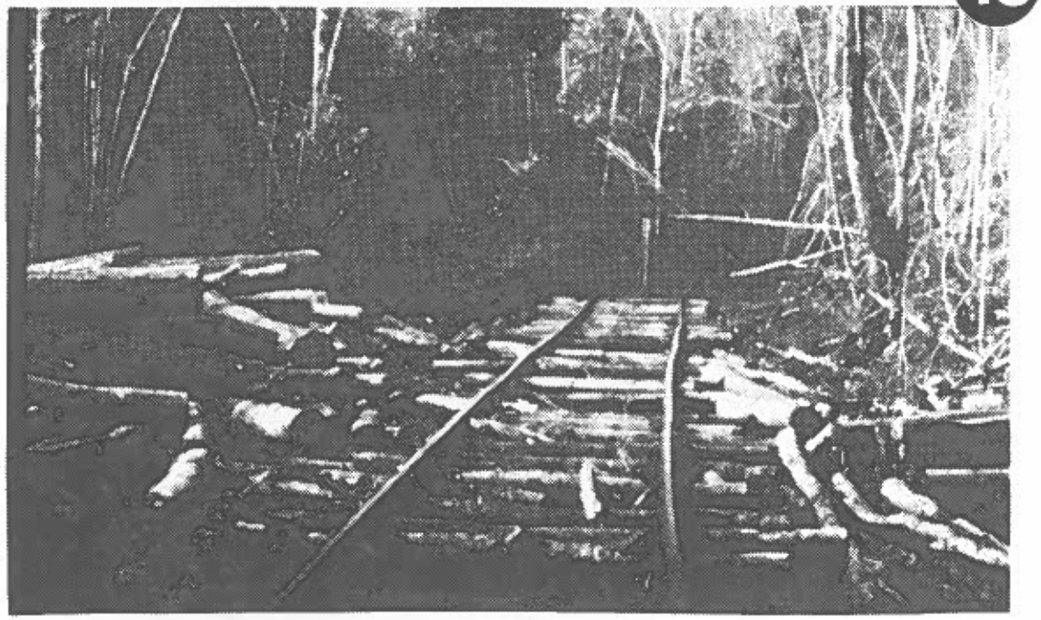
17 RICHMOND CEDAR WORKS RAILROAD, also known as the DISMAL SWAMP RAILROAD, ran from the Richmond Cedar Works on the Elizabeth River, into the swamp, crossing the Dismal Swamp Canal at Angle Siding.

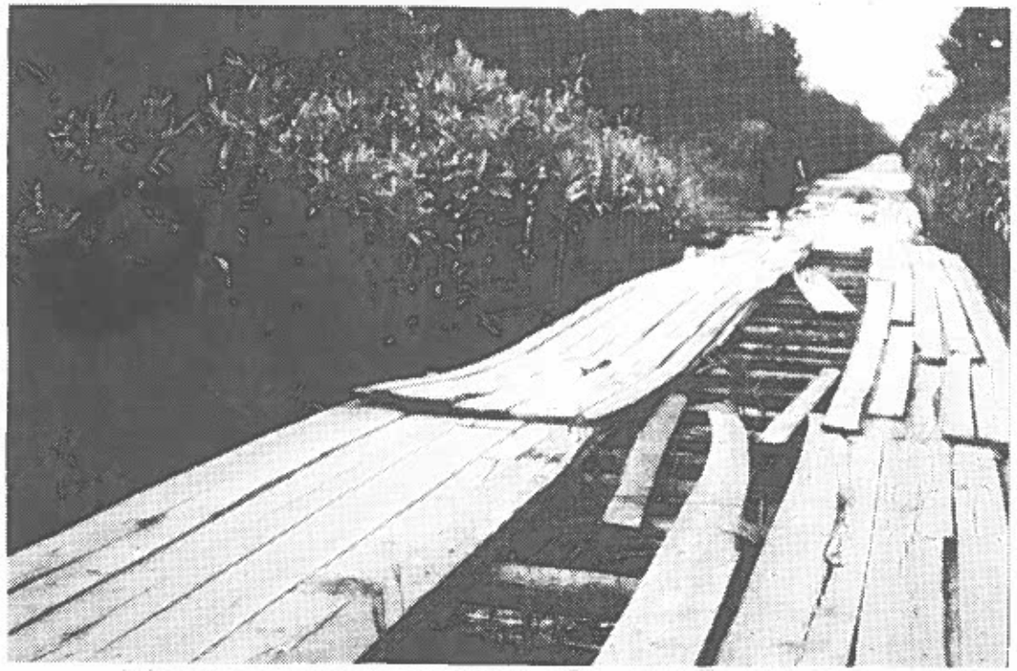
18 A branch of the DISMAL SWAMP RAILROAD crossed the Dismal Swamp Canal at Big Entry Ditch.

The survey of 1887

When the NC-VA state line was resurveyed in 1887, it crossed nine roughly north-south tramways, one just east of Riddick Ditch and the others between there and the west side of the swamp. None of these tramroads match any of the lines on the adjoining railway map; the Richmond Cedar Works line and the Corapeake Canal and its line are not shown. ("The Dividing Line in 1887," Map NC 52-A, NC Dept. of Archives and History, courtesy of J.E. Raynor and Mrs. Edith Seiling)

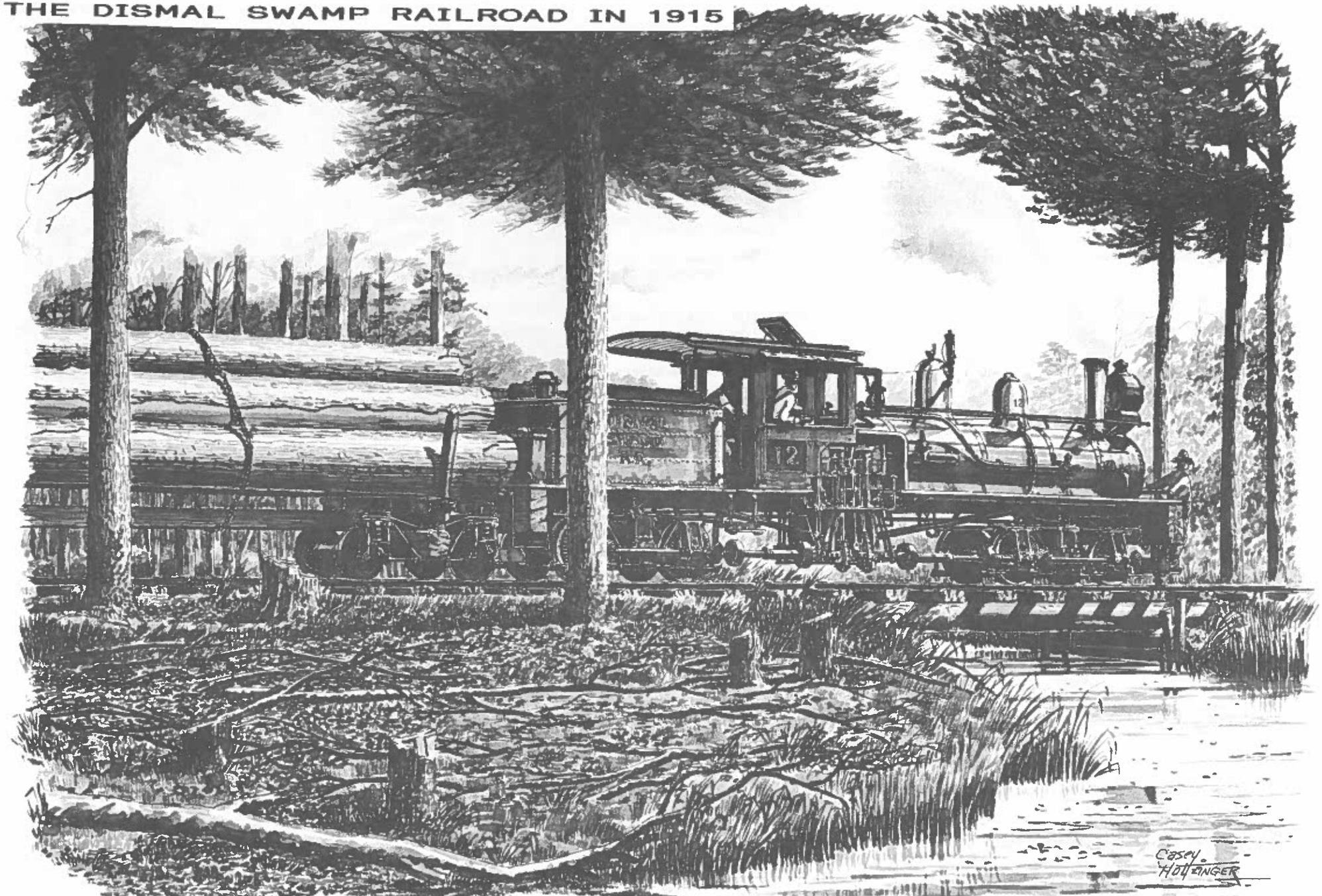
Many thanks to M.H. Ferrell and J.E. Raynor for help with this section.



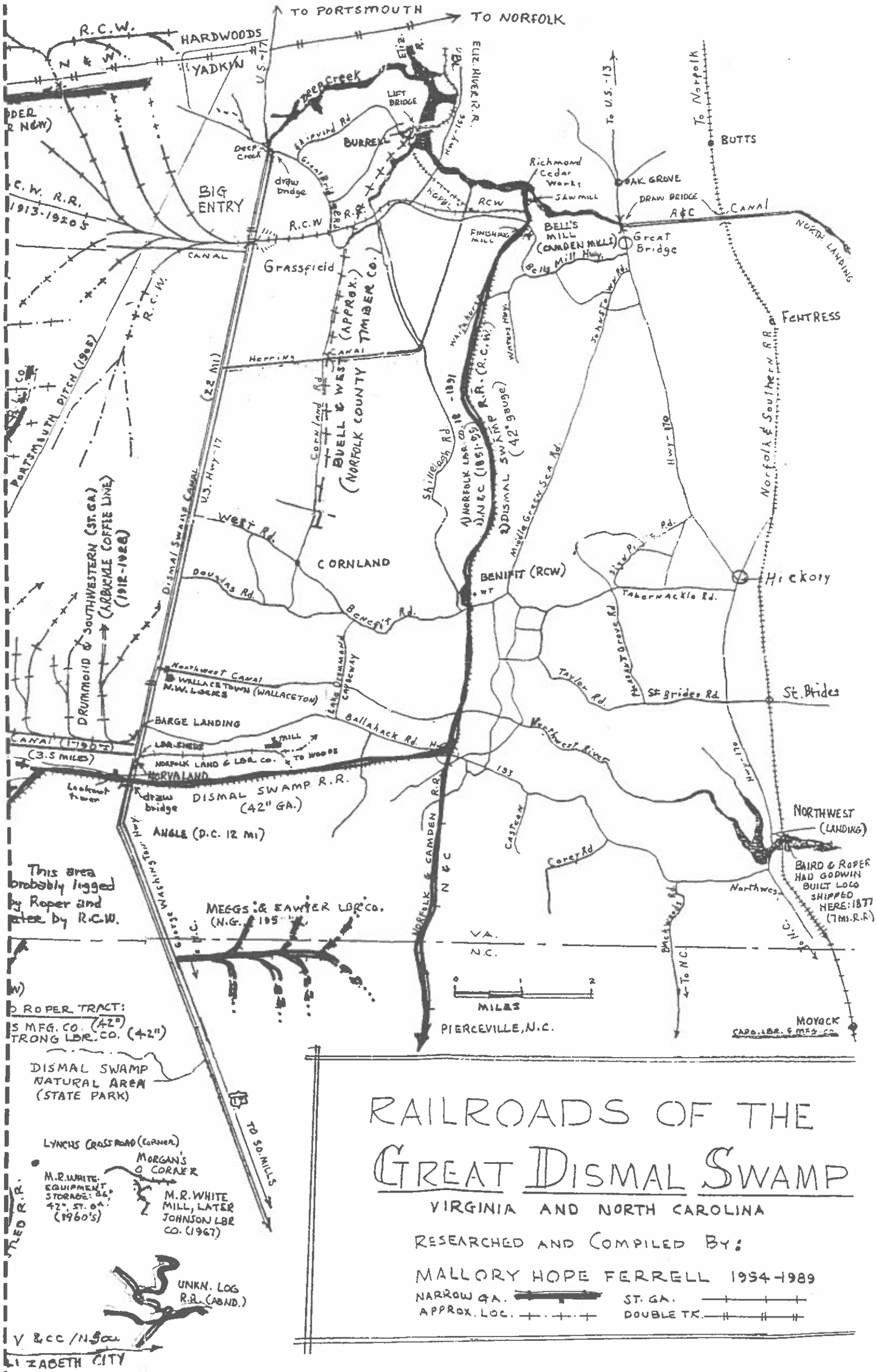


Two modes of swamp transportation still visible in 1964: End of the RR line crossing the Jericho Canal near Lynn Ditch; a plank road along the Weyerhauser Ditch in NC (Trout photos)

THE DISMAL SWAMP RAILROAD IN 1915



THE DISMAL SWAMP RAILROAD IN 1915, from one of Casey Holtzinger's color prints, reproduced with permission of his publisher, the Imperial Gallery in Virginia Beach. It is from a photo discovered by Mallory Hope Ferrell in an old J.H. Reid album at Union Camp, featuring a Lima Locomotive & Machine Works "Shay" locomotive (42" gauge) on the Richmond Cedar Works' Dismal Swamp Railroad. The scene illustrates the era of steam engines in the swamp. Do any of them still survive somewhere?



RAILROADS OF THE GREAT DISMAL SWAMP

VIRGINIA AND NORTH CAROLINA

RESEARCHED AND COMPILED BY:

MALLORY HOPE FERRELL 1954-1989

NARROW GA. ——— ST. GA. ———+———+———

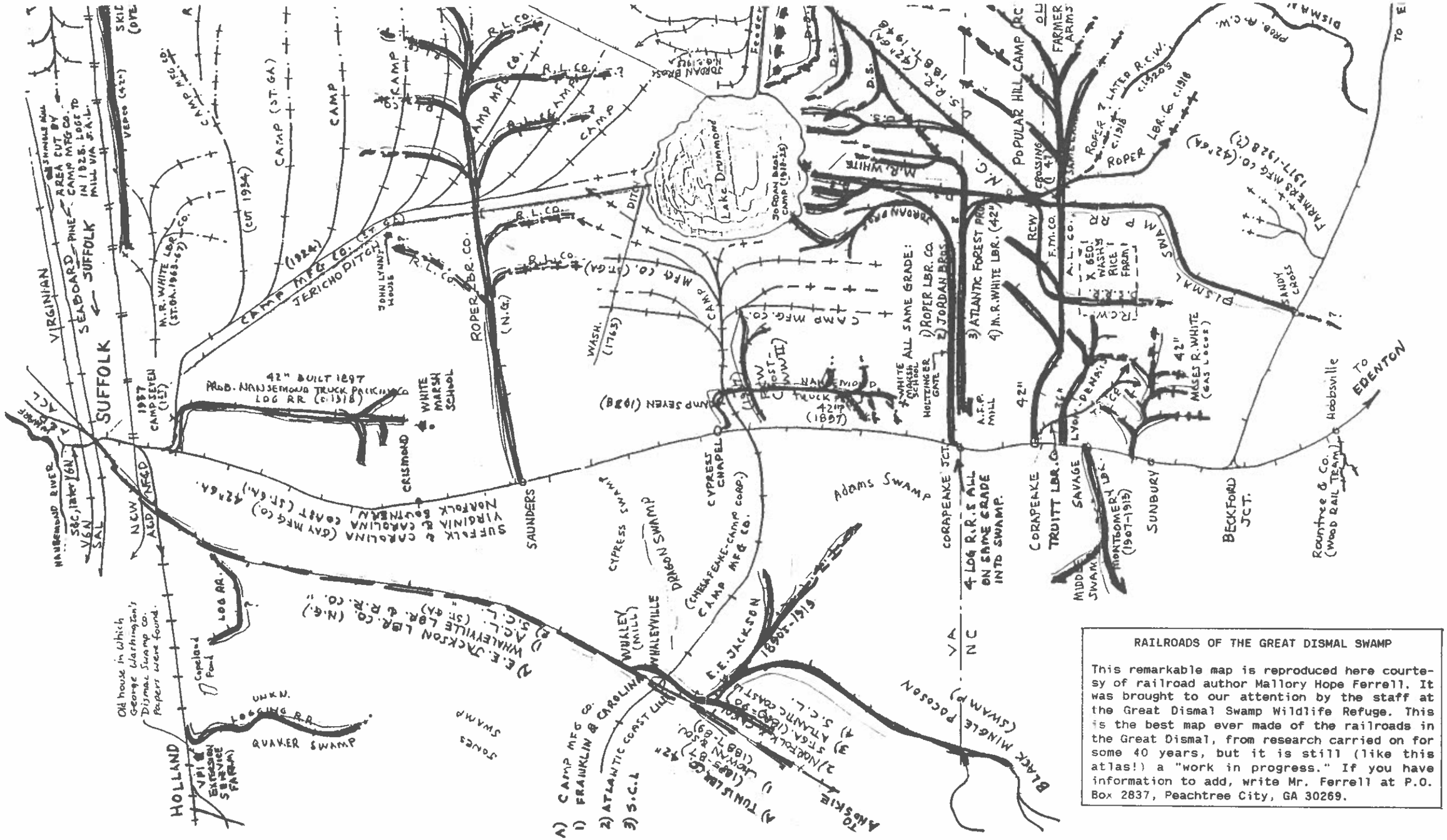
APPROX. LOC. ——+—·—+—·—+—— DOUBLE TK. ———||———||———

cut

TO MAKE YOUR OWN FOLD-OUT MAP, CUT ALONG THE DASHED LINE AND PASTE THE BOTTOM OF THIS PAGE TO THE TOP OF THE FACING PAGE

(The back of this map has been left blank)

TO MAKE YOUR OWN FOLD-OUT MAP,
PASTE THE BOTTOM OF THE FACING PAGE HERE.



RAILROADS OF THE GREAT DISMAL SWAMP

This remarkable map is reproduced here courtesy of railroad author Mallory Hope Ferrell. It was brought to our attention by the staff at the Great Dismal Swamp Wildlife Refuge. This is the best map ever made of the railroads in the Great Dismal, from research carried on for some 40 years, but it is still (like this atlas!) a "work in progress." If you have information to add, write Mr. Ferrell at P.O. Box 2837, Peachtree City, GA 30269.

When railways became practical, untold miles of track were laid in the Dismal Swamp, then taken up and laid again as operations moved. Some railway beds were placed on embankments formed by digging "borrow pits" - ditches - through the swamp; some railway lines were laid on rows of pilings, some driven down as much as 30 feet to reach a firm base. Where the ground was firm some rails were on ties simply laid on the ground. In its time, Union Camp had 59 miles of narrow-gauge track and seven locomotives. Derailments were common and were taken care of in the normal course of business. The earliest railways were tramroads, with cars drawn by mules. Then came steam engines, and lastly gasoline-powered ones.

One of these gas locomotives from the swamp, with a "skidder" is on display in the SOUTHAMPTON AGRICULTURE & FORESTRY MUSEUM, located on the east side of Courtland at 26315 Heritage Lane, Courtland, VA 23837, (757) 562-3277. Open March through November, 1 to 4 pm Wednesdays and Sundays.

This is the place to go for a glimpse of old-time logging in the Dismal Swamp. The museum also has a working sawmill, a country store and other buildings, farm tools and equipment and exhibits on Native Americans.

For sale in the gift shop are copies of Park Rouse Jr.'s THE TIMBER TYCOONS: THE CAMP FAMILIES OF VIRGINIA AND FLORIDA AND THEIR EMPIRE 1887-1987. It was of course Union Camp which donated the initial land for the Great Dismal Swamp National Wildlife Refuge, so there is much in this book about logging in the Great Dismal. On page 194 Rouse notes that "an unrealized ambition of James L. Camp, Jr., was to create a museum of forestry and lumbering," with a library. If anyone wants to take up this noble dream again, the Southampton Agriculture & Forestry Museum would be an ideal starting place. The Great Dismal Swamp desperately needs a central archive for researchers.

MOSES R. WHITE'S GAS LOCOMOTIVE

"This locomotive was owned by Moses R. White, Jr. who was owner and operator of M.R. White Lumber Co. His career began as a timberman and lumberman with Richmond Cedar Works and John L. Roper Lumber Companies in the Great Dismal Swamp.

He used a locomotive at several sites including South Mills, Roper, Bertie County, N.C. and St. Brides, Va. He ran his own shingle and sawmill on U.S. Highway 158 and logged in the Swamp. Mr. White was one of the last lumbermen to log with rail. He used this type of locomotive to bring out the Juniper, Pine and Hardwood timber. at one time he had as many as eight miles of track reaching into the Great Dismal Swamp. His operations using the locomotive were from 1933 - 1975."

The quotation and illustration at right are courtesy of William H. Howell, Jr., Director of the Southampton Agriculture & Forestry Museum. Many thanks also to Union Camp, Russell E. Darden, and Wayne and Kay Weeks of Morgans Corners for help with this section.

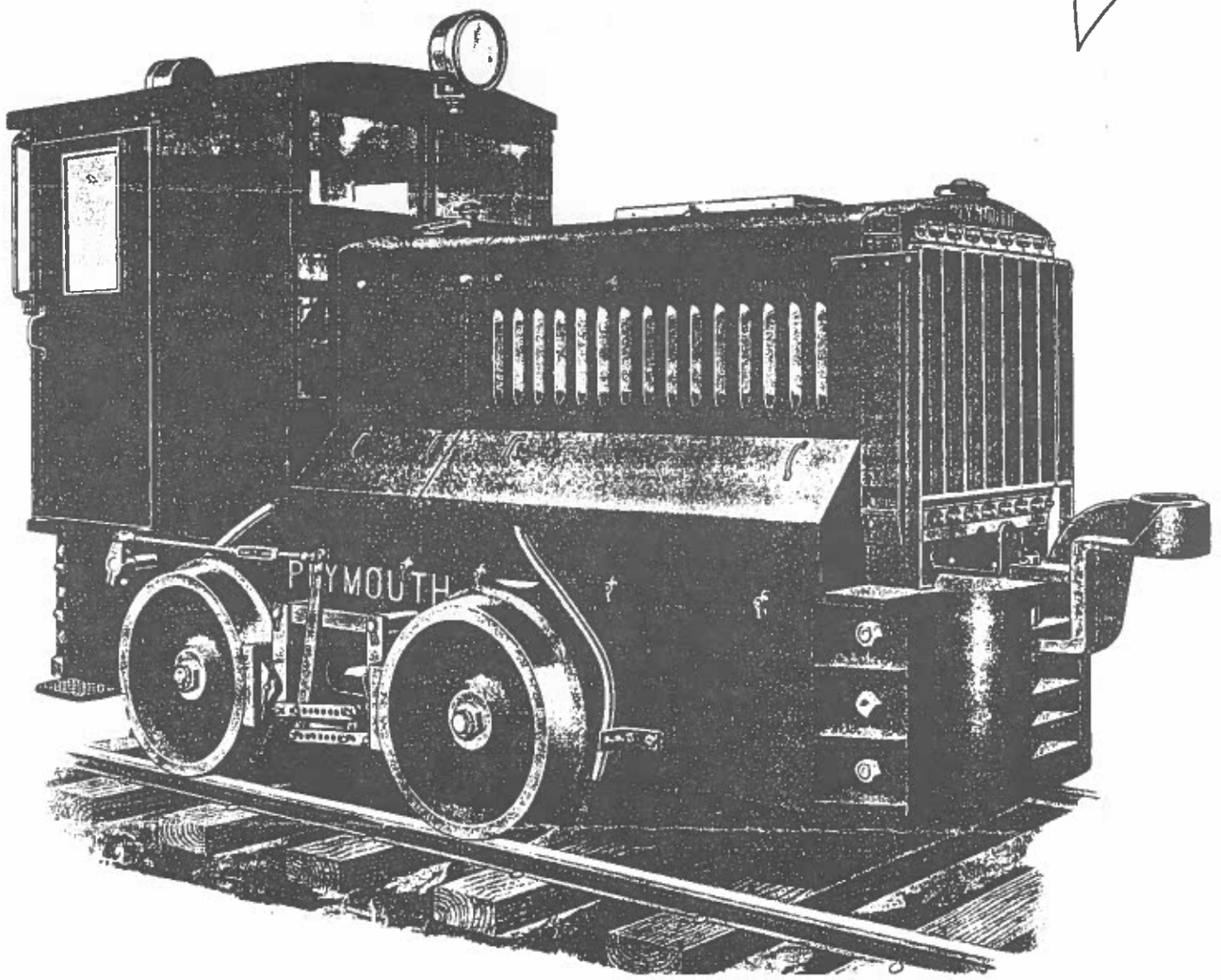
Moses White had three gas locomotives. A second one is on display at the DISMAL SWAMP CANAL WELCOME CENTER on US 17. The remains of Mr. White's "Juniper Mill" can still be seen in the swamp on US 58 (see the JUNIPER MILL page). It deserves to be marked and preserved as a rare surviving monument to the history of logging in the Great Dismal. For more about logging in the swamp see Bland Simpson's THE GREAT DISMAL, A CAROLINIAN'S SWAMP MEMOIR.

PLYMOUTH

13/8775
JXC
Hercules motor

PLYMOUTH Gasoline Locomotive

Type 6, Models DLB and DLC 8-Ton, 4 Speed Gear Drive



IN MEMORY OF THE IMMORTAL DISMALITES

WHO ON MARCH 13, 1728 DREW LOTS FOR THE PRIVILEGE
OF RUNNING THE LINE BETWEEN VIRGINIA AND NORTH CAROLINA
THROUGH THE GREAT DISMAL SWAMP
FROM MARCH 14 TO 22, 1728
"To gain immortal reputation by being the first of mankind
that ventured through the Great Dismal"

THE COMMISSIONERS APPOINTED TO DIRECT THE RUNNING OF THE LINE

- William Byrd, "Steddy"
- Richard Fitzwilliam, "Firebrand"
- William Dandridge, "Meanwell"

Esquires, commissioners for Virginia

- Christopher Gale, "Judge Jumble"
- John Lovick, "Shoebrush"
- Edward Moseley, "Plausible"
- William Little, "Puzzlecause"

Esquires, commissioners for Carolina

* Alexander Irvin, "Orion"
* William Mayo, "Astrolabe"
* and his brother Joseph Mayo

Surveyors for Virginia

- Edward Moseley, ""Plausible"
* Samuel Swann, "Boötes"

Surveyors for North Carolina

- The Reverend Peter Fontaine, Chaplain, "Doctor Humdrum"

(The nicknames were bestowed by William Byrd in his "Secret History of the Dividing Line")

THE MEN EMPLOYED TO RUN THE LINE ON THE FIRST EXPEDITION, FROM THE ATLANTIC OCEAN TO THE BLACKWATER RIVER

- Peter Jones
? Thomas Jones
? Thomas Short
* Robert Hix
* John Evans
? Stephen Evans
* John Ellis
- John Ellis, Jr.
? Thomas Wilson
? George Tilman
- Charles Kimball
* George Hamilton
? Robert Allen
? Thomas Jones, Jr.
- James Petillo
? Richard Smith
? John Rice

The men drew lots to determine who amongst them would be the nine "Immortal Dismalites" privileged to accompany the surveyors through the Great Dismal. Byrd's "Secret History of the Dividing Line" does not list these nine, but a close reading shows some who did or did not go.

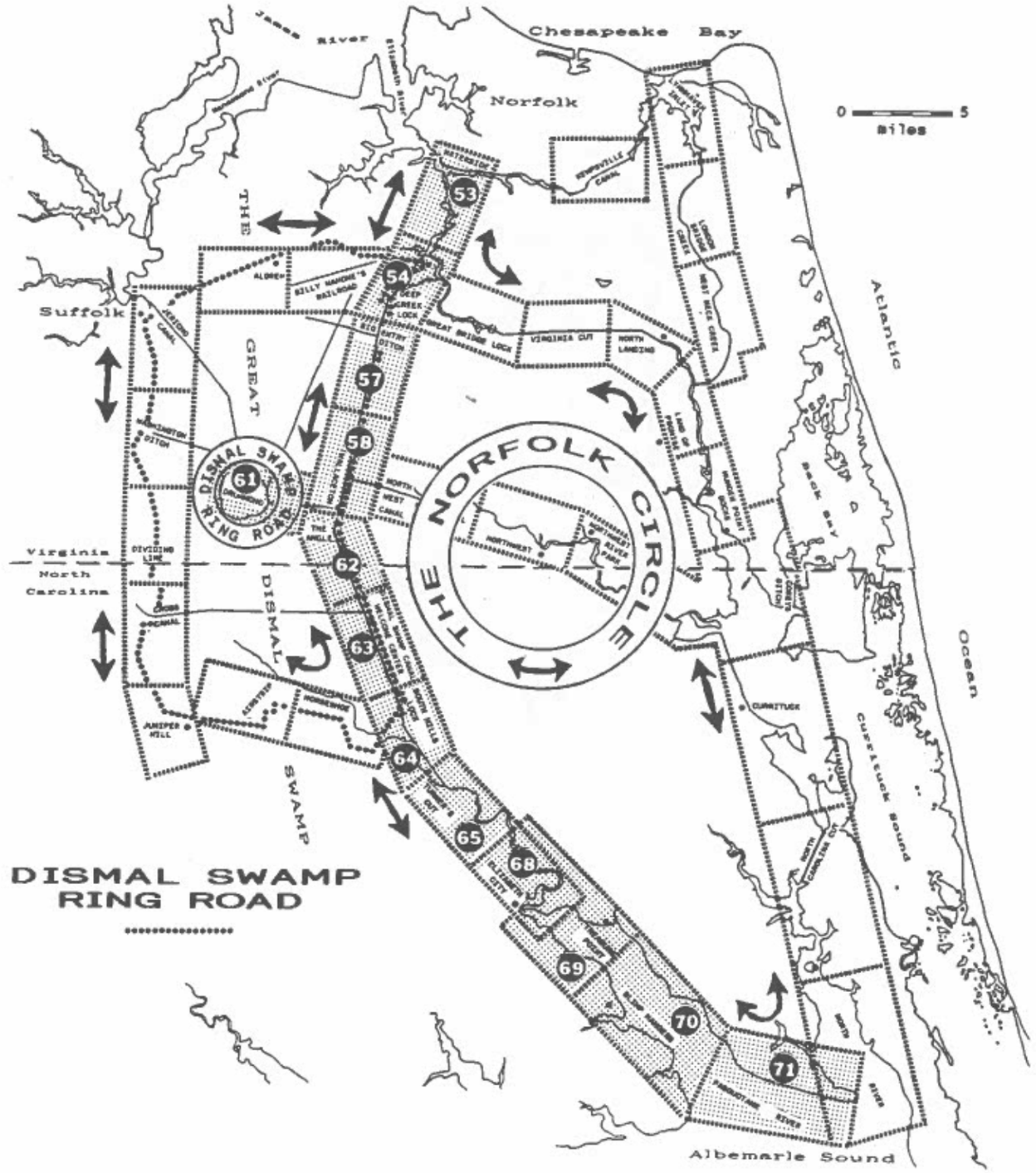
* = Traversed the swamp, one of the "Immortal Dismalites"
- = Known to not have traversed the swamp
? = Not known

For annotated versions of Byrd's "Secret History of the Dividing Line" and "History of the Dividing Line" see THE PROSE WORKS OF WILLIAM BYRD OF WESTOVER, edited by Louis B. Wright, Harvard University Press, 1966.

PART 2:

DRIVING AND CRUISING THE DISMAL SWAMP CANAL:

EXPLORING THE SWAMP'S MOST FAMOUS WATERWAY



DISMAL SWAMP RING ROAD

STRIP MAPS IN PART 2 ARE SHADED

50 DRIVING THE DISMAL SWAMP RING ROAD

PART TWO: DRIVING ALONG THE DISMAL SWAMP CANAL
(Continued from Part 1, driving counterclockwise around the swamp, page 17)

ATLAS PAGE | **ITINERARY**

The strip maps in PART 1 started near PORTSMOUTH and followed THE DISMAL SWAMP RING ROAD counterclockwise around the heart of the Great Dismal to MORGANS CORNERS, at the junction of US 158 and US 17. The strip maps here in PART 2 complete the DISMAL SWAMP RING ROAD back to Portsmouth, following US 17 along the Dismal Swamp Canal. If you are driving counterclockwise, follow the PART 2 strip maps in reverse order, going north.

64 **CONTINUING THE DISMAL SWAMP RING ROAD:** From Morgans Corners follow US 17 N 1.2 miles then R on Bus.17 1.0 mile to the **DISMAL SWAMP CANAL** bridge in **SOUTH MILLS. SOUTH MILLS LOCK** is 0.5 mile S down the canal. There is a road on each bank to the lock. On the W bank is a dead-end road to the lock compound, which may be locked up. Take the E bank road (Bingham), a public road, 0.5 mile south for a good view of the lock through the fence. Continue 1.3 miles for an excellent view of **TURNER'S CUT**, the canal's southern extension.

Go back N on Bingham Road for 1.8 miles, L across the canal bridge, R at 0.4 mile on Horseshoe Road, and R at 0.3 mile onto US 17 North, to cross the canal on the **HIGH BRIDGE** for an aerial view of South Mills, the canal, and the swamp.
(SIDE TRIP: Take Horseshoe Road W for 3 miles to the swamp town of **HORSESHOE.)**

63 At 4.7 miles N of South Mills, stop at the **DISMAL SWAMP CANAL WELCOME CENTER**, a "must see." Don't miss the information desk, the yachts, the historic plaques and Moses White's gas locomotive used for lumbering in the Great Dismal.

62 Continue 3.1 miles N to the **STATE LINE.** Note the 1887 stone marker (L). The famous **LAKE DRUMMOND HOTEL** or **HALFWAY HOUSE** on the atlas cover was just N of here. After 1.8 miles, bear right through **THE ANGLE.**

58 After 1.1 miles stop opposite the **FEEDER DITCH** for an impressive view towards (but not of) Lake Drummond, 3½ miles E. Just N is the **PUBLIC BOAT RAMP.** See the USEFUL INFORMATION page about boat and kayak tours to the Lake.

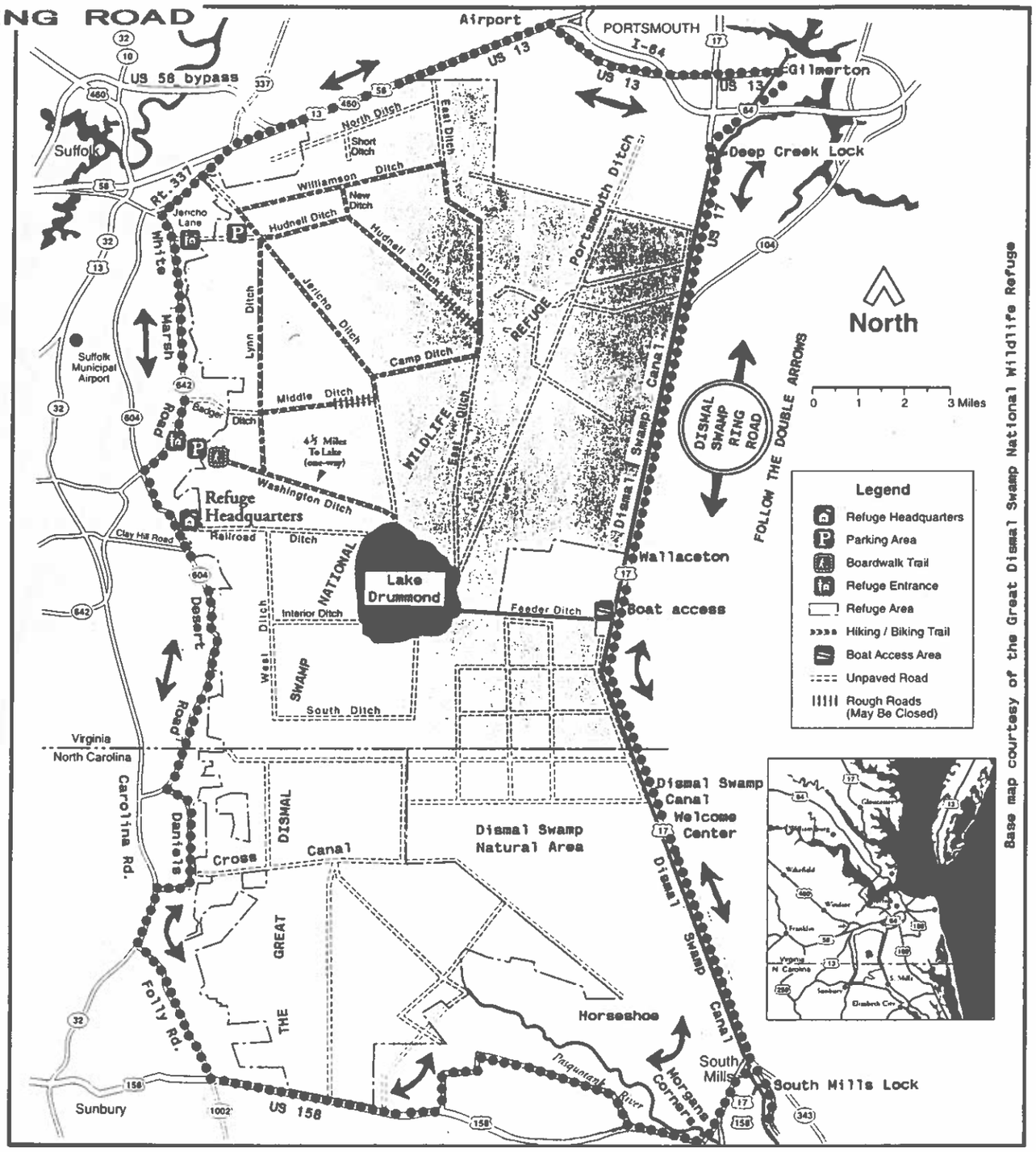
At 1.5 more miles the **CANAL SUPERINTENDENT'S HOUSE** at **WALLACETON** is on the left, and the historic **WALLACE HOMESTEAD** on the right. A trace of the **NORTH WEST CANAL** can be seen here along Glencoe Road.
(SIDE TRIP: FOLLOW THE NORTH WEST CANAL. See the strip maps in PART 4.)

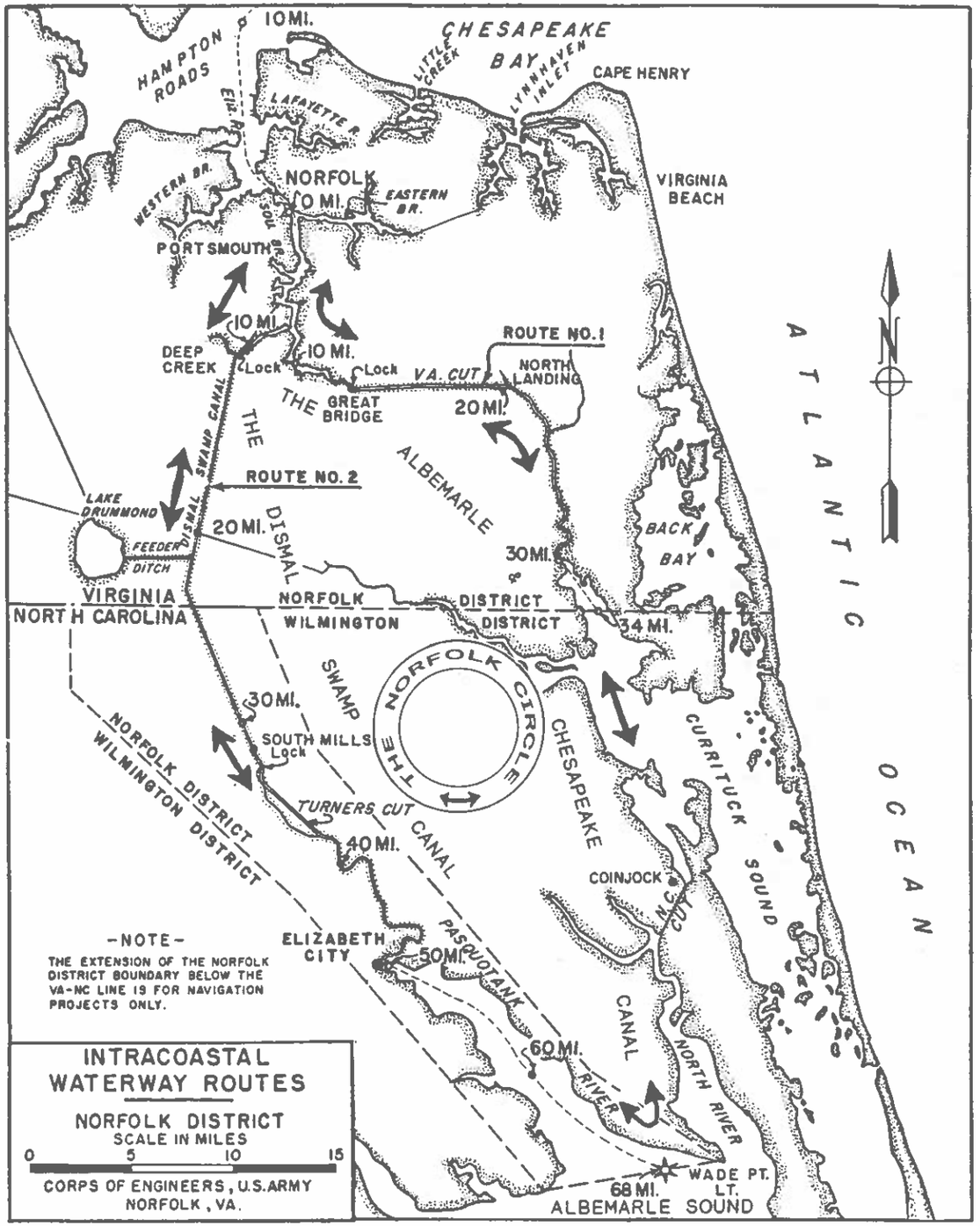
57 Continue N on US 17 for 5.5 miles, jog L onto US 17 at Rt.104, and N 3.4 miles to
54 the canal bridge in **DEEP CREEK.** Cross the bridge (L) and R at 0.2 mile on Luray Street into **DEEP CREEK LOCKS PARK,** an important canal site (see detailed map).

Continue 0.5 mile N on US 17 and R on Shell Road. At 1.8 miles Shell Road turns R then L, crossing **THE GILMERTON CUT,** visible N and S of here. From 1843 to 1890 this cut was the Dismal Swamp Canal's northern extension. At 1.0 miles turn L (east) onto US 13/460, the Military Highway. Stop at 0.3 mile where our route crosses the **GILMERTON CUT** again. R (north) up the cut, just out of sight, is the cut-stone **GILMERTON LOCK** (private).

(SIDE TRIPS: Just to the north are nautical museums in **NORFOLK** and **PORTSMOUTH.** Just to the east is **GREAT BRIDGE LOCK** (see PART 3). To the northeast are the scanty remains of the **KEMPSVILLE CANAL** (see PART 4).)

This ends the DISMAL SWAMP RING ROAD tour. The arbitrary starting point at US 13 and I-64 is 2.8 miles W on US 13/460.





Waterway Guide Cruise

THE NORFOLK CIRCLE

A good short cruise for boats based (either permanently or just passing through) in the Norfolk area is what might be called the Norfolk Circle Cruise—with Norfolk at its north end and Albemarle Sound on the south. The trip can start at any point on the roughly circular route, be made in either direction, and makes a complete circuit, never backtracking or covering any area twice.

Along the way, the yachtsman traverses the magnificent **Dismal Swamp Canal**, and lovely **Pasquotank River**, touches the edge of sometimes rough **Albemarle Sound**, runs the full length of the scenic **Virginia Cut.** Throughout he sees some of everything the Tidewater Country has to offer—raw wilderness and wildlife, a river that rivals any in the area for natural beauty, side creeks to gunkhole by dinghy, small villages that time has left virtually unchanged, a series of locks, even a side trip (by dinghy) to a lake locked in on all sides by virtually impenetrable swamp.

From Norfolk, the route leads southwesterly through two locks, along wildly beautiful Dismal Swamp Canal to the winding Pasquotank River with its wooded shores, narrow and wide areas, patches of handsome homes. **Elizabeth City** is the big layover port here.

Then it's southward to the northern rim of Albemarle Sound, around **Camden Point** and up **North River**, where a number of creeks and side-waters offer tempting dinghy trips through attractive country. This is the Virginia Cut route where **Coinjock, Pungo Ferry** and **Great Bridge** all offer good stopovers; and then back to the starting point in Norfolk.

The entire trip is about 125 miles long and it makes a delightful cruise for three to five days, depending on the number and length of layovers. (For full navigation details and descriptions, see appropriate text sections.)

The summary at left of the NORFOLK CIRCLE, reproduced with permission from an old (1974) edition of WATERWAY GUIDE, says it all.

The best way to see canals is by boat, and here, in the Dismal Swamp region, two of the most historic canals in the country are still navigable. Both the DISMAL SWAMP CANAL and the ALBEMARLE & CHESAPEAKE CANAL connect Norfolk with Albemarle Sound. Together they form a popular cruising route known as the NORFOLK CIRCLE. Once fierce rivals, both canals are now operated toll-free by the Corps of Engineers, and both are part of the ATLANTIC INTRACOASTAL WATERWAY, over a thousand miles long, between Norfolk and Miami.

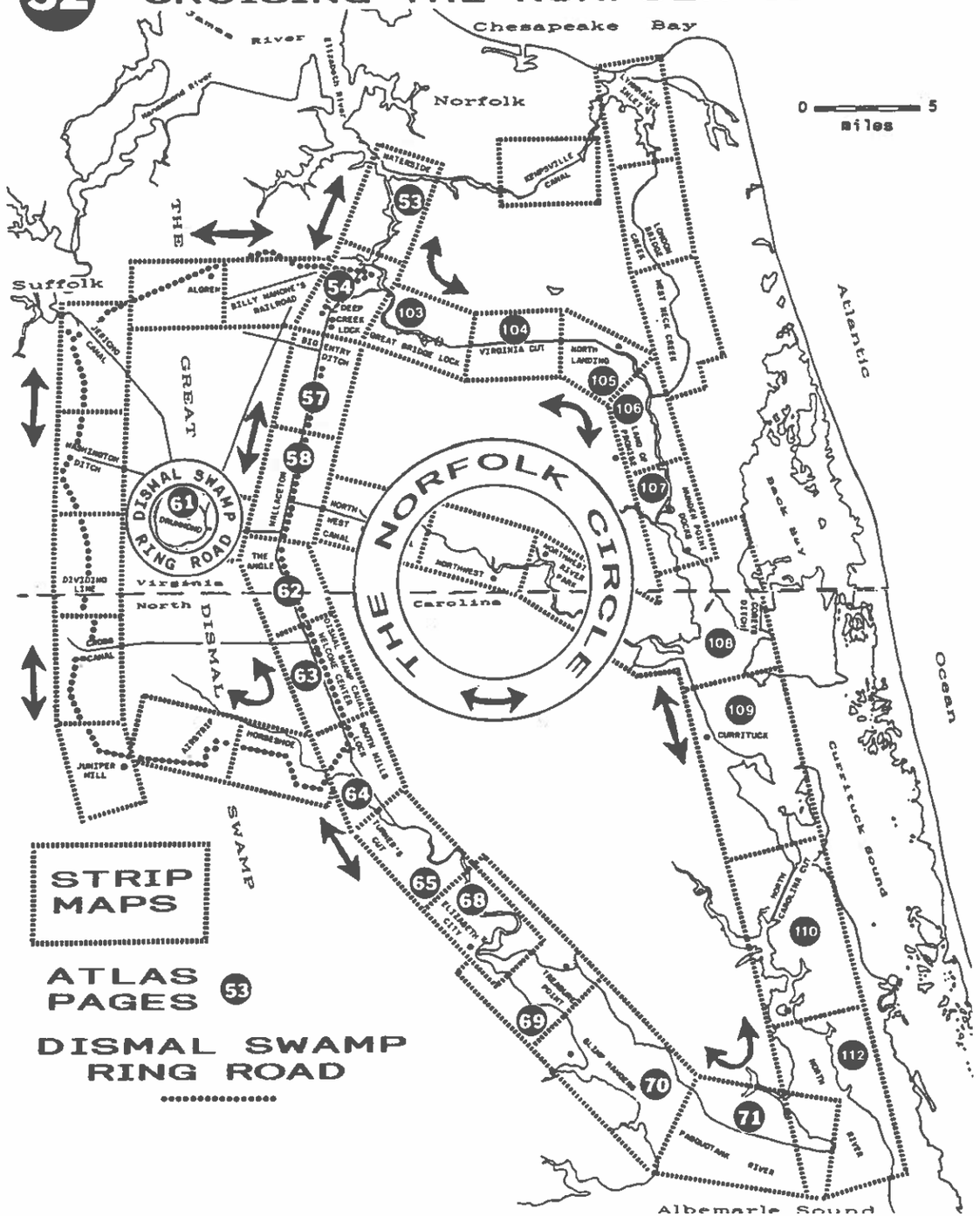
The NORFOLK CIRCLE, down one canal and up the other, is about 130 miles long and makes a delightful, historic cruise of three to five days. Much of the route is in open, shallow and therefore sometimes rough water suitable only for larger craft, and it is important for such craft to keep to the dredged channels. But take along a dinghy, canoe or kayak to sample some of the side trips up winding tributaries, many of which are local or state-designated scenic waterways.

THE GREAT DISMAL ATLAS covers the entire Norfolk Circle route, with annotated maps to make the voyage more interesting. These maps should not, however, be used for navigation. Lights, markers, depths and other data are subject to change. Use the latest version of Chart 12206-SC, "Norfolk to Albemarle Sound" (see the Nautical Charts page in this atlas). Also essential is the latest Mid-Atlantic Edition of WATERWAY GUIDE, available at marinas, and by mail from Waterway Guide, 6151 Powers Ferry Rd. NW, Atlanta, GA 30339, (800) 233-3359. This has a great deal of practical up-to-date information on marinas and navigation which need not be repeated here in THE GREAT DISMAL ATLAS.

A NORFOLK CIRCLE cruise can start anywhere on the circle and go in either direction. The itinerary on the next page starts in Norfolk and proceeds south down the Dismal Swamp Canal to Albemarle Sound. Part 4 of this atlas covers the rest of the trip up the Albemarle & Chesapeake Canal back to Norfolk. Only brief site descriptions are given in the itinerary; see the strip maps for details.

Note that the strip maps (except those based on the nautical charts) have a kilometer-square (UTM) grid. This is handy for locating historic sites, using the UTM setting on your GPS device.

52 CRUISING THE NORFOLK CIRCLE



STRIP MAPS

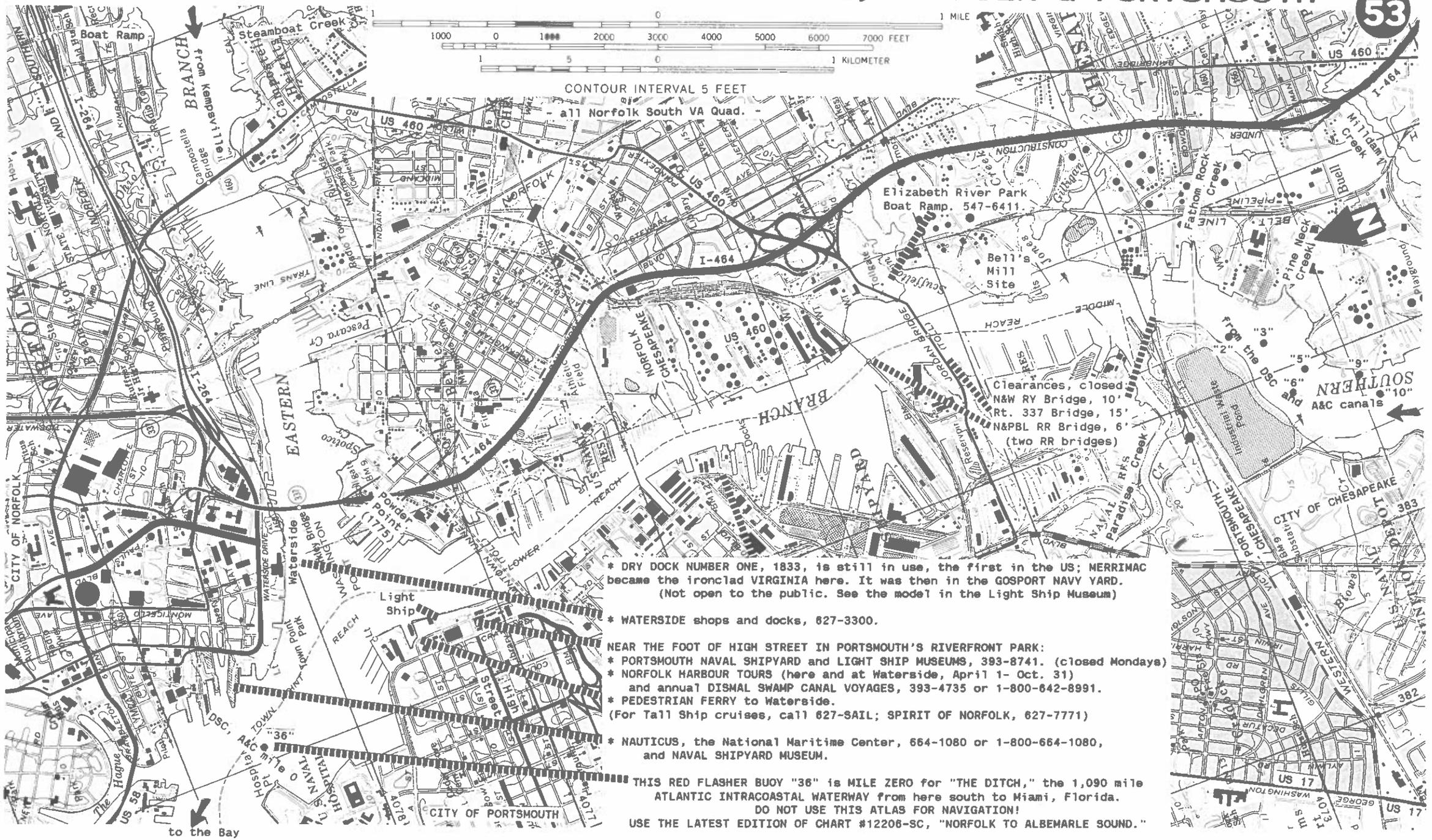
ATLAS PAGES 53

DISMAL SWAMP RING ROAD

THE NORFOLK CIRCLE, SECTION ONE: CRUISING THE DISMAL SWAMP CANAL
(See PART 3 of this atlas for the Albemarle & Chesapeake Canal part of the circle)

ATLAS PAGE	ITINERARY
53	**IWW STATUTE MILE 0.5: WATERSIDE** is the place to moor in downtown Norfolk, convenient to shops and museums including a lightship. Nearby is buoy "36" the **MILE ZERO MARKER** for the Atlantic Intracoastal Waterway (IWW) south to Miami. The first leg south is through a fascinating array of huge navy and merchant ships. With luck you can peek into **DRY DOCK #1** (R), the first in the US.
54	**MILE 5:** Take a look from the water at the **GILMERTON LOCK** (private) behind the Atlantic Energy Company's dock. This stone lock was once the northern entrance to the Dismal Swamp Canal. **MILE 7:** At a sign under the high-level I-64 bridge the IWW forks into Route 1 (the A&C Canal) and Route 2 (the Dismal Swamp Canal). For the Dismal Swamp Canal route turn right into **DEEP CREEK.** **MILE 11:** See the detailed guide to **DEEP CREEK LOCKS PARK.** The canal itself starts at **DEEP CREEK LOCK,** which will raise your boat up to 12 feet depending on the tide. The "juniper water" here is natural root beer, with foam and an amber color.
57	Here we are in the arrow-straight **DISMAL SWAMP CANAL,** the oldest surviving canal in continuous use in the country, first opened in 1805. Here and there are the mouths of lateral ditches from the swamp. A number of the original **CANAL MILESTONES** have been found and reset on the west (L) bank. The old numbers start at 0 at Deep Creek Lock (now IWW Mile 11).
58	**MILE 20: At WALLACETON** note the wooden **SUPERINTENDENT'S HOUSE** (L), the canal company's only remaining early building, under restoration by the canal society, and the historic **WALLACE HOMESTEAD. THE NORTH WEST CANAL,** now blocked off, once took boats from here to Currituck Sound.
61	**MILE 21.4:** Past the boat landing (L) is (R) the entrance to the **FEEDER DITCH FROM LAKE DRUMMOND** (R), accessible by dinghy and shallow-draft craft. This is the eastern, water, access to **THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE.**
62	**MILE 23: THE ANGLE.** One can explore the round island (R) at Mile 25 by dinghy or canoe. **MILE 24.7: 1887 STATE LINE MARKER,** of stone, between the canal and US 17.
63	**MILE 28:** Stop at **THE DISMAL SWAMP CANAL WELCOME CENTER** (L) with a dock for your boat, a gas locomotive used for lumbering in the swamp, and tourist information. Further along you might spot a few stones (R) at the waterline from **CULPEPPER LOCK,** removed in the 1890's.
64	**MILE 33: SOUTH MILLS LOCK** will lower your boat 12 feet. Take a look through the periscope. Past the lock you enter **TURNER'S CUT,** the canal's southern extension. It bypasses the notorious **MOCCASIN TRACK,** which can be explored by dinghy or canoe.
65	**MILE 37:** Here the route enters the **PASQUOTANK RIVER.** See the latest charts for navigation aids.
68	**MILE 44.6:** The prominent **OLD BRICK HOUSE** (R) is historic but it was probably not Blackbeard's! **MILE 50.8:** Hospitable **ELIZABETH CITY** offers 48 hours of free dockage at **MARINER'S WHARF,** a nearby Chamber of Commerce office, walking tours of the historic districts, and **THE MUSEUM OF THE ALBEMARLE. NOTE CHANGE IN SCALE OF THE STRIP MAPS** as they change from topo maps to navigation charts.
69	Here begins the wide (but relatively shallow) part of the Pasquotank River.
70	**MILE 58.2:** An enormous **BLIMP HANGER** (R) (and a blimp if you are lucky) is visible for miles.
71	**MILE 68: PASQUOTANK RIVER ENTRANCE LIGHT** at ALBEMARLE SOUND. FROM HERE BACK TO NORFOLK FOLLOW THE ALBEMARLE & CHESAPEAKE CANAL STRIP MAPS (PART 3 OF THIS ATLAS) IN REVERSE ORDER, SOUTH TO NORTH.

WATERSIDE, NORFOLK & PORTSMOUTH



* DRY DOCK NUMBER ONE, 1833, is still in use, the first in the US; MERRIMAC became the ironclad VIRGINIA here. It was then in the GOSPORT NAVY YARD. (Not open to the public. See the model in the Light Ship Museum)

* WATERSIDE shops and docks, 627-3300.

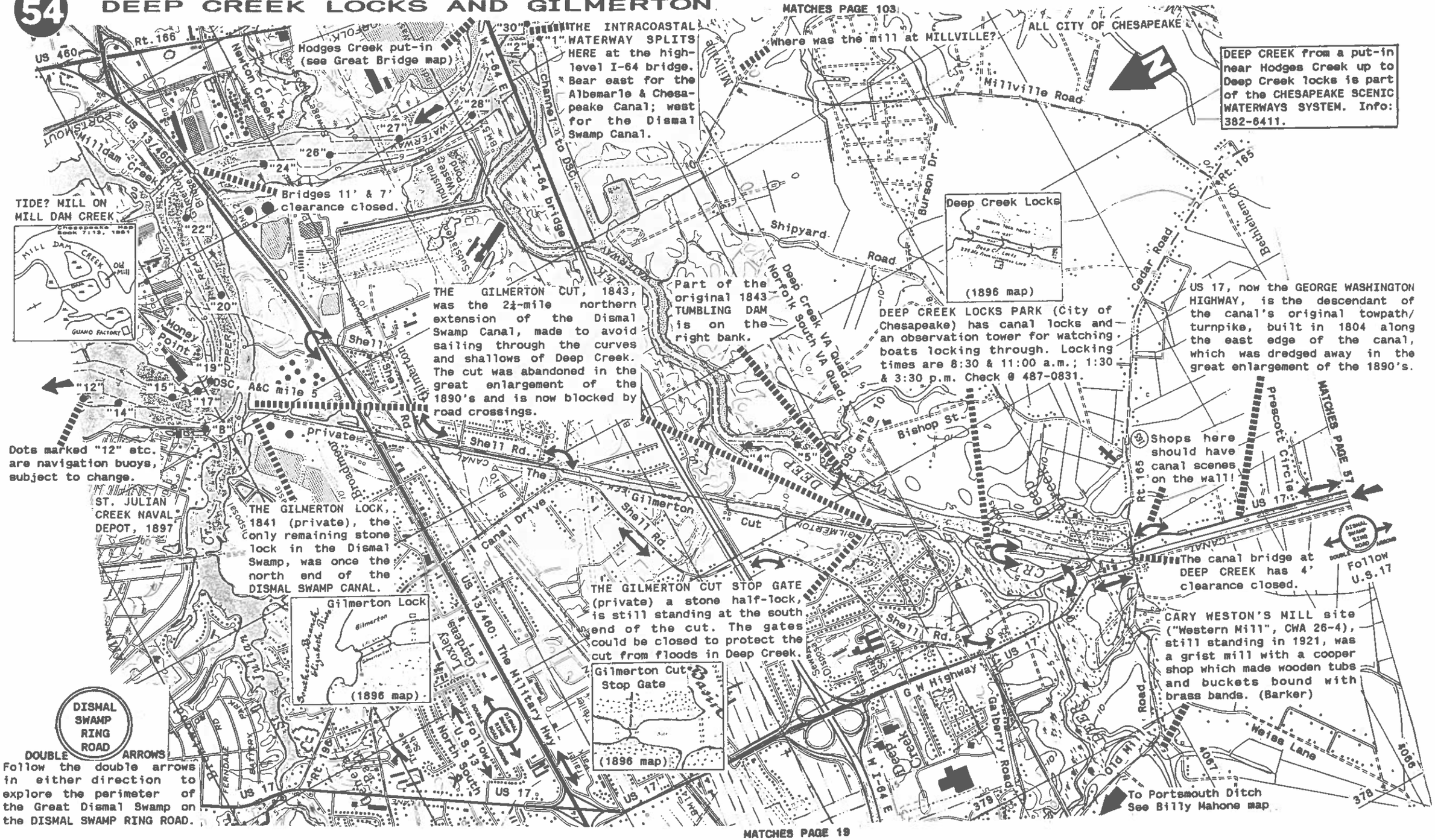
NEAR THE FOOT OF HIGH STREET IN PORTSMOUTH'S RIVERFRONT PARK:
* PORTSMOUTH NAVAL SHIPYARD and LIGHT SHIP MUSEUMS, 393-8741. (closed Mondays)
* NORFOLK HARBOUR TOURS (here and at Waterside, April 1- Oct. 31) and annual DISMAL SWAMP CANAL VOYAGES, 393-4735 or 1-800-642-8991.
* PEDESTRIAN FERRY to Waterside.

(For Tall Ship cruises, call 627-SAIL; SPIRIT OF NORFOLK, 627-7771)

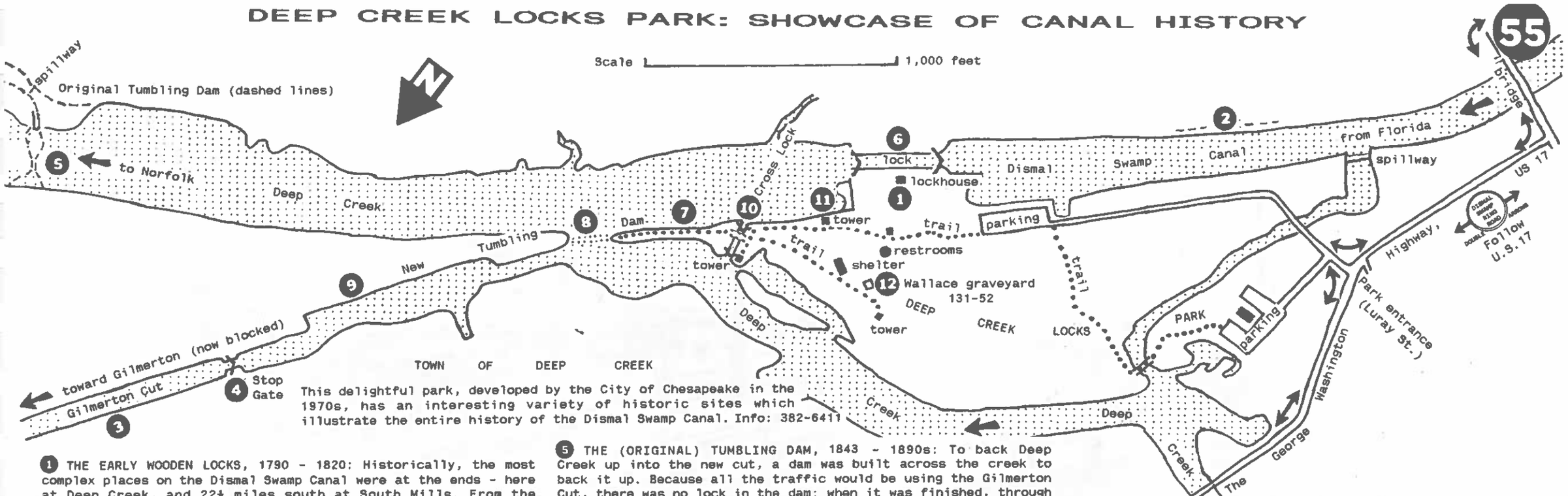
* NAUTICUS, the National Maritime Center, 664-1080 or 1-800-664-1080, and NAVAL SHIPYARD MUSEUM.

THIS RED FLASHER BUOY "36" is MILE ZERO for "THE DITCH," the 1,090 mile ATLANTIC INTRACOASTAL WATERWAY from here south to Miami, Florida.
DO NOT USE THIS ATLAS FOR NAVIGATION!
USE THE LATEST EDITION OF CHART #12206-SC, "NORFOLK TO ALBEMARLE SOUND."

54 DEEP CREEK LOCKS AND GILMERTON


MATCHES PAGE 103
ALL CITY OF CHESAPEAKE
Where was the mill at MILLVILLE?
DEEP CREEK from a put-in near Hodges Creek up to Deep Creek locks is part of the CHESAPEAKE SCENIC WATERWAYS SYSTEM. Info: 382-6411.
THE INTRACOASTAL WATERWAY SPLITS HERE at the high-level I-64 bridge. * Bear east for the Albemarle & Chesapeake Canal; west for the Dismal Swamp Canal.
Hodges Creek put-in (see Great Bridge map)
Bridges 11' & 7' clearance closed.
TIDE? MILL ON MILL DAM CREEK
THE GILMERTON CUT, 1843, was the 2¼-mile northern extension of the Dismal Swamp Canal, made to avoid sailing through the curves and shallows of Deep Creek. The cut was abandoned in the great enlargement of the 1890's and is now blocked by road crossings.
Part of the original 1843 TUMBLING DAM is on the right bank.
Deep Creek Locks
(1896 map)
DEEP CREEK LOCKS PARK (City of Chesapeake) has canal locks and an observation tower for watching boats locking through. Locking times are 8:30 & 11:00 a.m.; 1:30 & 3:30 p.m. Check @ 487-0831.
US 17, now the GEORGE WASHINGTON HIGHWAY, is the descendant of the canal's original towpath/turnpike, built in 1804 along the east edge of the canal, which was dredged away in the great enlargement of the 1890's.
Dots marked "12" etc. are navigation buoys, subject to change.
ST. JULIAN CREEK NAVAL DEPOT, 1897
THE GILMERTON LOCK, 1841 (private), the only remaining stone lock in the Dismal Swamp, was once the north end of the DISMAL SWAMP CANAL.
Gilmerton Lock
(1896 map)
THE GILMERTON CUT STOP GATE (private) a stone half-lock, is still standing at the south end of the cut. The gates could be closed to protect the cut from floods in Deep Creek.
Gilmerton Cut Stop Gate
(1896 map)
Shops here should have canal scenes on the wall!
MATCHES PAGE 57
The canal bridge at DEEP CREEK has 4' clearance closed.
CARY WESTON'S MILL site ("Western Mill", CWA 26-4), still standing in 1921, was a grist mill with a cooper shop which made wooden tubs and buckets bound with brass bands. (Barker)
DISMAL SWAMP RING ROAD
DOUBLE ARROWS Follow the double arrows in either direction to explore the perimeter of the Great Dismal Swamp on the DISMAL SWAMP RING ROAD.
To Portsmouth Ditch See Billy Mahone map
MATCHES PAGE 19

DEEP CREEK LOCKS PARK: SHOWCASE OF CANAL HISTORY



This delightful park, developed by the City of Chesapeake in the 1970s, has an interesting variety of historic sites which illustrate the entire history of the Dismal Swamp Canal. Info: 382-6411

1 THE EARLY WOODEN LOCKS, 1790 - 1820: Historically, the most complex places on the Dismal Swamp Canal were at the ends - here at Deep Creek, and 22½ miles south at South Mills. From the canal's beginnings in the 1790s the locks were of juniper wood, which were rebuilt as they rotted away, some even before the canal first opened in 1805. No one knows now how many locks were at Deep Creek or exactly where they were, but they were probably in the immediate vicinity of the present locks and may still be buried underground, waiting to be rediscovered. They were probably similar in size and construction to the CROSS LOCK, **10**.

1 THE STONE LOCKS, 1820 - 1890s: Deep Creek's two stone locks (a two-lock staircase) were probably near **1**. The gates were of local timber but the stone was imported from Newark, New Jersey and from quarries on the Susquehanna, Potomac and James rivers; and the mortar came from both New and Old England.

2 THE DISMAL SWAMP CANAL TOWPATH, 1804 - 1890s: Boats not towed by steamboats were towed by mules from a towpath which was also a popular stage-coach route, open in 1804 along the east edge of the canal. It was dug away during the great enlargement of the 1890s and was replaced by a new road, now U.S.17, the George Washington Highway, which is some distance from the edge of the canal so it was never used for towing boats.

3 THE GILMERTON CUT, 1843 - 1890s: Boats had trouble navigating along Deep Creek, a tortuous channel with shoals and no towpath. This was bypassed by a straight 2¼-mile canal. At the north end (not shown) the Gilmerton Lock lowered boats into the Elizabeth River; at the south end the STOP GATE **4** of stone, had a pair of gates which could be closed to keep Deep Creek floods out of the cut. This gate is not now a part of Deep Creek park, but it can be visited by water.

5 THE (ORIGINAL) TUMBLING DAM, 1843 - 1890s: To back Deep Creek up into the new cut, a dam was built across the creek to back it up. Because all the traffic would be using the Gilmerton Cut, there was no lock in the dam; when it was finished, through traffic ceased on Deep Creek.

THE GREAT ENLARGEMENT OF THE 1890s:

1 THE 1890'S LOCKS, 1890s - 1940s: To compete with its great rival the Albemarle & Chesapeake Canal, the Dismal Swamp Canal was entirely redone. A large new lock of timber was constructed on the west side of the stone one, which may be at least partially intact underground at **1**.

5 THE ORIGINAL TUMBLING DAM IS REMOVED, 1890s: As part of the great enlargement the Gilmerton Cut was abandoned and all traffic was returned to Deep Creek, which was dredged and straightened. Most of the original tumbling dam was dredged out for the new channel, which is still used today. Part of the dam is left, on the south side, and can be visited by water.

7 **8** **9** THE (NEW) TUMBLING DAM: 1890s - CA. 1916: Removing the old Tumbling Dam left wharves in Deep Creek high and dry at low tide, so a new dam was built to keep the creek backed up. Part of the embankment, **7**, can be walked along in Deep Creek Park to **8**, pilings left of the dam's wooden spillway which has rotted away. This gap is now the channel for small craft. More of the dam embankment is at **9**.

10 THE CROSS LOCK, ca. 1890s: This lock, a prominent feature in Deep Creek Locks Park, allowed small craft to pass through the new Tumbling Dam. About 100 feet long and 10 feet wide, it is close to the size of the earliest locks at Deep Creek which were built two centuries ago. It, too, is of timber but with interesting iron "hollow quoins" where the gates swung, and concrete parts have been added. It would be fun to put gates of the original type, with long balance beams, back in this lock as a comparison with the modern lock, where visitors can safely practice "locking through" for themselves.

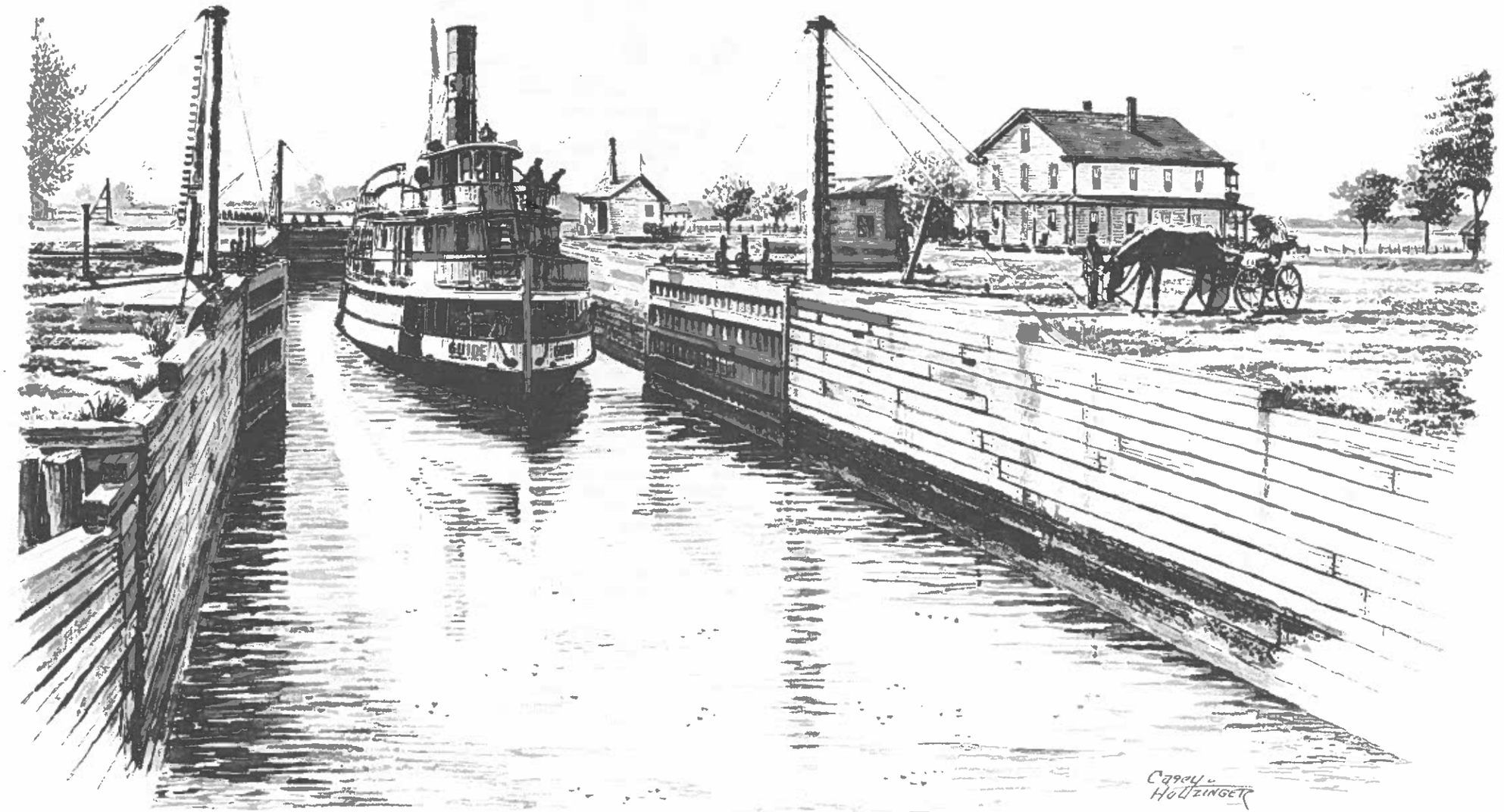
6 THE MODERN DEEP CREEK LOCK, 1941: The lock in use today is larger than the rest, with a chamber 300 by 52 feet, built by the Corps of Engineers. During construction, one wall probably from the old stone lock was dug up. The 1890s lock was abandoned and buried, probably reasonably intact, at **1**.

1 MARINE RAILWAY, ca. 1954 - 1970: During droughts, a marine railway here and at South Mills portaged small craft around the locks without using critical swamp water. It was dismantled in 1970, parts of it taken to the marine railway at Lake Drummond.

11 THIS OBSERVATION TOWER in the park is handy for watching boats lock through. Be there at the official locking times, 8:30 and 11:00 a.m., and 1:30 and 3:30 p.m. Further south, the U.S.17 bridge over the canal has a clearance of 4' when closed; boats toot three times to open it. Beside the tower is a plaque erected in 1971 by the American Society of Civil Engineers, designating the Dismal Swamp Canal a NATIONAL HISTORIC CIVIL ENGINEERING LANDMARK. Beside it is a hollow quoin stone from a lock, inscribed "N8+". Where did these stones come from?

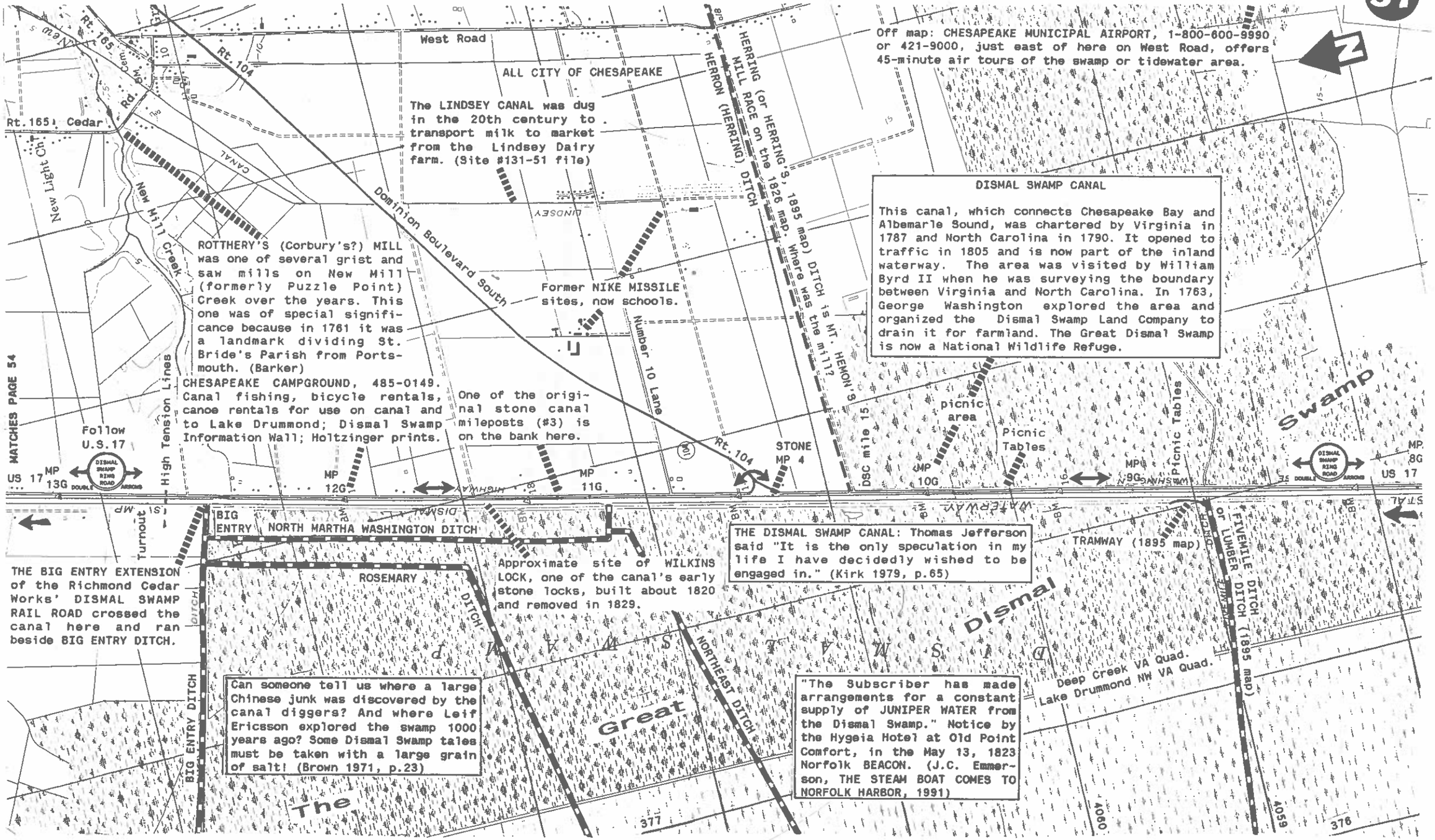
12 WALLACE FAMILY GRAVEYARD. A Dismal Swamp Canal family, the founders of Glencoe Plantation, including George T. Wallace (1812-1889), and his wife Elizbeth, author of GLENCOE DIARY.

56 DEEP CREEK LOCK IN 1910

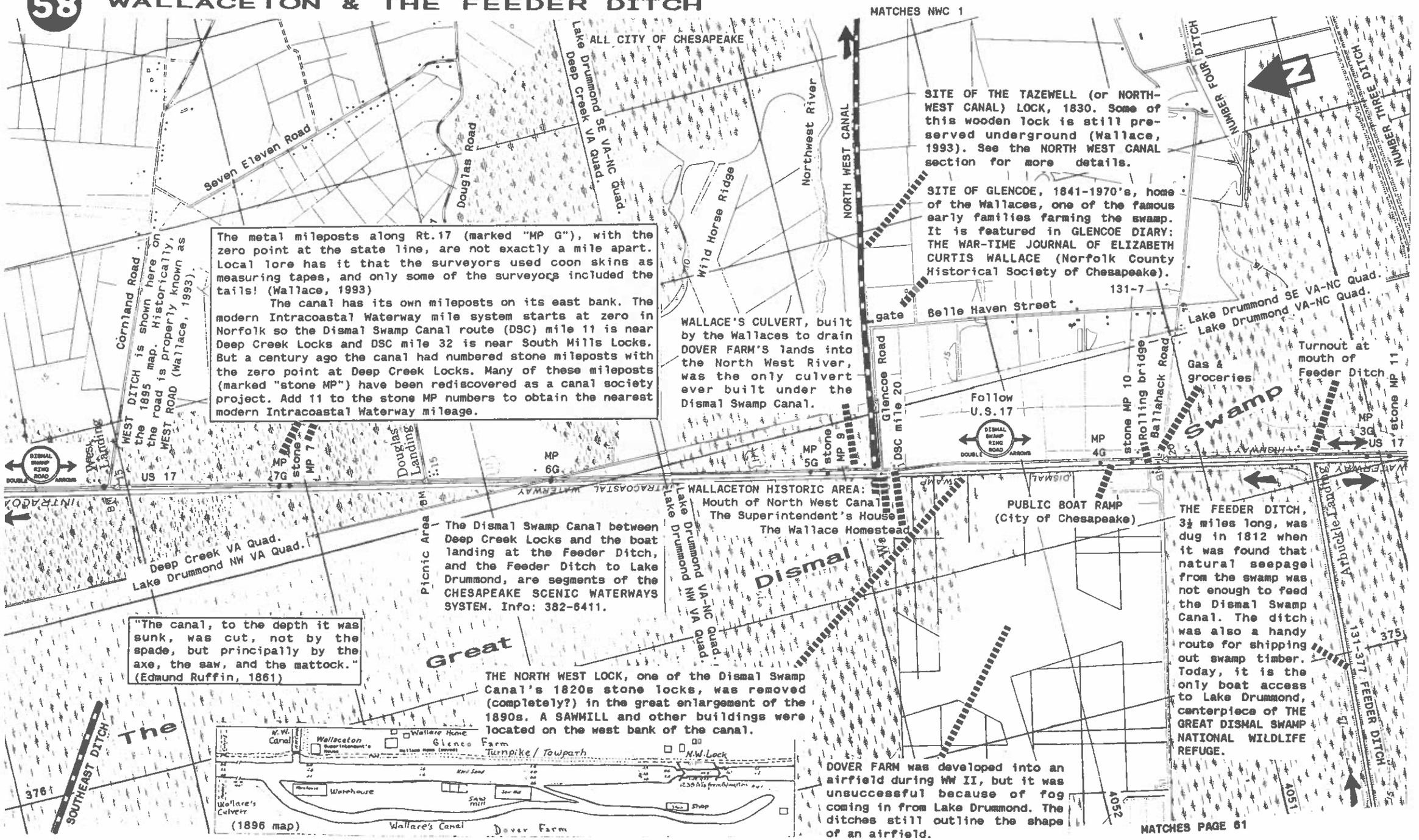


DEEP CREEK LOCK IN 1910, a print by Casey Holtzinger, reproduced with permission of the publisher, the Imperial Gallery in Virginia Beach. This meticulous drawing is based on an H.C. Mann photo in the Library of Virginia. See Alexander Brown's THE DISMAL SWAMP CANAL, p.164. The lock house is at right. Brown notes that the small house in the middle with the stack housed a steam donkey engine to haul barges into the lock after their tugboat cast them loose. In this drawing the screw steamboat GUIDE has been lowered to sea level in Deep Creek and is on her way north to Norfolk (See Brown, p.168).

Perhaps because of the unusual width of the lock, the lock gates do not have long wooden "balance beams" to balance the weight and serve as a lever for opening and closing. Instead, weight of each gate is supported by a guy wire from a tower, and apparently each gate is pushed closed and pulled open by a long beam on a windlass.

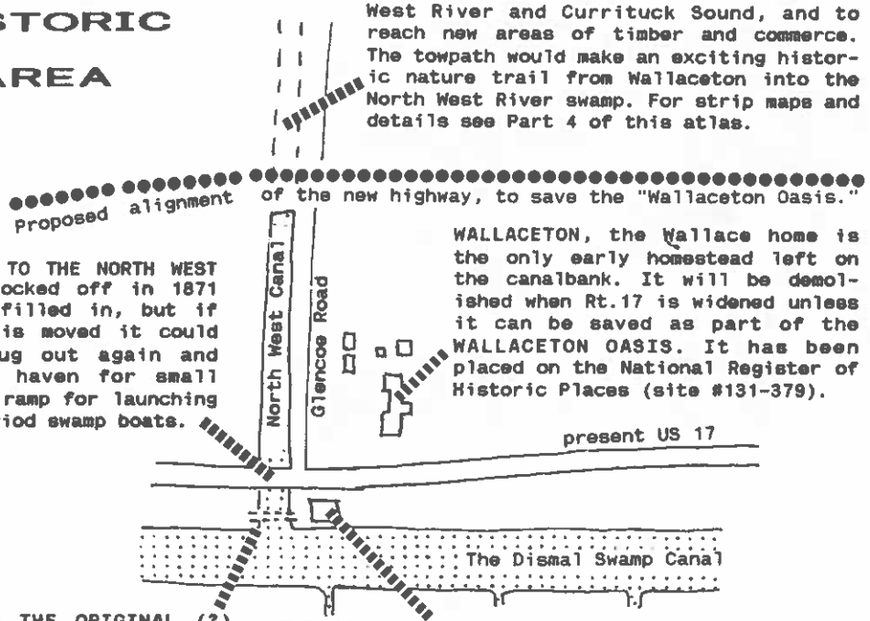

West Road
ALL CITY OF CHESAPEAKE
Rt. 104
Rt. 165
Rt.165 Cedar
New Light Ch.
New Mill Creek
Dominion Boulevard South
The LINDSEY CANAL was dug in the 20th century to transport milk to market from the Lindsey Dairy farm. (Site #131-51 file)
LINDSEY CANAL
HERRING (HERRING) DITCH
HERRING MILL RACE (or HERRING'S, 1895 map) DITCH is NT. HEMON'S
Off map: CHESAPEAKE MUNICIPAL AIRPORT, 1-800-600-9990 or 421-9000, just east of here on West Road, offers 45-minute air tours of the swamp or tidewater area.
DISMAL SWAMP CANAL
This canal, which connects Chesapeake Bay and Albemarle Sound, was chartered by Virginia in 1787 and North Carolina in 1790. It opened to traffic in 1805 and is now part of the inland waterway. The area was visited by William Byrd II when he was surveying the boundary between Virginia and North Carolina. In 1763, George Washington explored the area and organized the Dismal Swamp Land Company to drain it for farmland. The Great Dismal Swamp is now a National Wildlife Refuge.
ROTTHERY'S (Corbury's?) MILL was one of several grist and saw mills on New Mill (formerly Puzzle Point) Creek over the years. This one was of special significance because in 1761 it was a landmark dividing St. Bride's Parish from Portsmouth. (Barker)
CHESAPEAKE CAMPGROUND, 485-0149. Canal fishing, bicycle rentals, canoe rentals for use on canal and to Lake Drummond; Dismal Swamp Information Wall; Holtzinger prints.
Former NIKE MISSILE sites, now schools.
Number 10 Lane
One of the original stone canal mileposts (#3) is on the bank here.
MATCHES PAGE 54
High Tension Lines
Follow U.S.17
US 17 MP 13G
MP 12G
MP 11G
STONE MP 4
DSC mile 15
picnic area
Picnic Tables
MP 10G
MP 9G
Swamp
MP 8G
US 17
BIG ENTRY NORTH MARTHA WASHINGTON DITCH
THE BIG ENTRY EXTENSION of the Richmond Cedar Works' DISMAL SWAMP RAIL ROAD crossed the canal here and ran beside BIG ENTRY DITCH.
Approximate site of WILKINS LOCK, one of the canal's early stone locks, built about 1820 and removed in 1829.
THE DISMAL SWAMP CANAL: Thomas Jefferson said "It is the only speculation in my life I have decidedly wished to be engaged in." (Kirk 1979, p.65)
TRAMWAY (1895 map)
FIVEMILE or LUMBER DITCH (1895 map)
ROSEMARY DITCH
BIG ENTRY DITCH
NORTHEAST DITCH
Can someone tell us where a large Chinese junk was discovered by the canal diggers? And where Leif Ericsson explored the swamp 1000 years ago? Some Dismal Swamp tales must be taken with a large grain of salt! (Brown 1971, p.23)
"The Subscriber has made arrangements for a constant supply of JUNIPER WATER from the Dismal Swamp." Notice by the Hygeia Hotel at Old Point Comfort, in the May 13, 1823 Norfolk BEACON. (J.C. Emmerson, THE STEAM BOAT COMES TO NORFOLK HARBOR, 1991)
Great Dismal Swamp
Deep Creek VA Quad.
Lake Drummond NW VA Quad.
377
376
4060
4059

58 WALLACETON & THE FEEDER DITCH


MATCHES NWC 1
ALL CITY OF CHESAPEAKE
Lake Drummond SE VA-NC Quad.
Deep Creek VA-NC Quad.
Seven Eleven Road
Douglas Road
Northwest River
Wild Horse Ridge
NORTH WEST CANAL
NUMBER FOUR DITCH
NUMBER THREE DITCH
Cornland Road
WEST DITCH is shown here on the 1895 map. Historically, the road is properly known as WEST ROAD (Wallace, 1993).
The metal mileposts along Rt.17 (marked "MP G"), with the zero point at the state line, are not exactly a mile apart. Local lore has it that the surveyors used coon skins as measuring tapes, and only some of the surveyors included the tails! (Wallace, 1993)
The canal has its own mileposts on its east bank. The modern Intracoastal Waterway mile system starts at zero in Norfolk so the Dismal Swamp Canal route (DSC) mile 11 is near Deep Creek Locks and DSC mile 32 is near South Mills Locks. But a century ago the canal had numbered stone mileposts with the zero point at Deep Creek Locks. Many of these mileposts (marked "stone MP") have been rediscovered as a canal society project. Add 11 to the stone MP numbers to obtain the nearest modern Intracoastal Waterway mileage.
SITE OF THE TAZEWELL (or NORTH-WEST CANAL) LOCK, 1830. Some of this wooden lock is still preserved underground (Wallace, 1993). See the NORTH WEST CANAL section for more details.
SITE OF GLENCOE, 1841-1970's, home of the Wallaces, one of the famous early families farming the swamp. It is featured in GLENCOE DIARY: THE WAR-TIME JOURNAL OF ELIZABETH CURTIS WALLACE (Norfolk County Historical Society of Chesapeake).
WALLACE'S CULVERT, built by the Wallaces to drain DOVER FARM'S lands into the North West River, was the only culvert ever built under the Dismal Swamp Canal.
131-7
gate
Belle Haven Street
Lake Drummond SE VA-NC Quad.
Lake Drummond VA-NC Quad.
Glencoe Road
DSC mile 20
Rolling bridge
Ballahack Road
stone MP 10
Gas & groceries
Follow U.S.17
Turnout at mouth of Feeder Ditch
stone MP 11
MP 3G
US 17
MP 4G
MP 5G
stone MP 9
MP 6G
MP 7G
stone MP 7
West Landing
Douglas Landing
US 17
INTRACOASTAL WATERWAY
Swamp
DISMAL SWAMP RING ROAD DOUBLE ARROWS
WALLACETON HISTORIC AREA:
Mouth of North West Canal
The Superintendent's House
The Wallace Homestead
PUBLIC BOAT RAMP (City of Chesapeake)
Picnic Area
The Dismal Swamp Canal between Deep Creek Locks and the boat landing at the Feeder Ditch, and the Feeder Ditch to Lake Drummond, are segments of the CHESAPEAKE SCENIC WATERWAYS SYSTEM. Info: 382-6411.
Deep Creek VA Quad.
Lake Drummond NW VA Quad.
Lake Drummond NW VA-NC Quad.
Great
Dismal
Swamp
THE FEEDER DITCH, 3½ miles long, was dug in 1812 when it was found that natural seepage from the swamp was not enough to feed the Dismal Swamp Canal. The ditch was also a handy route for shipping out swamp timber. Today, it is the only boat access to Lake Drummond, centerpiece of THE GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE.
Arbuckle Landing
131-377 FEEDER DITCH
375
405
405½
"The canal, to the depth it was sunk, was cut, not by the spade, but principally by the axe, the saw, and the mattock." (Edmund Ruffin, 1861)
THE NORTH WEST LOCK, one of the Dismal Swamp Canal's 1820s stone locks, was removed (completely?) in the great enlargement of the 1890s. A SAWMILL and other buildings were located on the west bank of the canal.
The
SOUTHEAST DITCH
376
N.W. Canal
Wallaceton
Wallace Home
Glence Farm
Turnpike / Towpath
N.W. Lock
Warehouse
Sand
Saw Mill
Shop
Wallace's Culvert
(1896 map)
Wallace's Canal
Dover Farm
DOVER FARM was developed into an airfield during WW II, but it was unsuccessful because of fog coming in from Lake Drummond. The ditches still outline the shape of an airfield.
MATCHES PAGE 61

THE WALLACETON HISTORIC AREA

THE NORTH WEST CANAL (historic site #131-36) was the Dismal Swamp Canal's gateway to the Atlantic, built in the 1830's to link the Dismal Swamp Canal with the North West River and Currituck Sound, and to reach new areas of timber and commerce. The towpath would make an exciting historic nature trail from Wallaceton into the North West River swamp. For strip maps and details see Part 4 of this atlas.


Proposed alignment of the new highway, to save the "Wallaceton Oasis."
North West Canal
Glencoe Road
present US 17
The Dismal Swamp Canal

THE ENTRANCE TO THE NORTH WEST CANAL was blocked off in 1871 and largely filled in, but if the highway is moved it could easily be dug out again and made into a haven for small craft with a ramp for launching authentic period swamp boats.

WALLACETON, the Wallace home is the only early homestead left on the canalbank. It will be demolished when Rt.17 is widened unless it can be saved as part of the WALLACETON OASIS. It has been placed on the National Register of Historic Places (site #131-379).

STONEWORK OF THE ORIGINAL (?) TOWPATH BRIDGE across the entrance of the North West Canal can still be seen at the water's edge; an interesting lift bridge for hikers could be placed on these original foundations.

THE CANAL SUPERINTENDENT'S HOUSE (#131-380) is the only original Dismal Swamp Canal Company building still existing. When the Wallaces ran it as a tea room in the 1930's it was featured in the WPA guide to Virginia; now it is about to collapse. It is owned by the Corps and is on the National Register of Historic Places as part of the Dismal Swamp Canal Historic District. This is now the canal company's most important building, and it should be preserved as a major point of interest along the canal.

"Wallaceton is not so much a town as a state of mind. There are two dwellings, a country store and postoffice combined, and a sawmill in the remote suburbs on the far side of the canal." (THE BOY SCOUTS OF THE AIR IN THE DISMAL SWAMP, by Gordon Stuart, 1920)

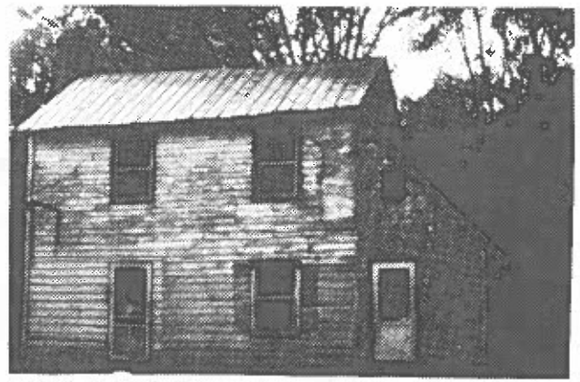
The widening of Rt.17 into a four-lane highway will be a last-chance opportunity to create an historic "oasis" midway along the Dismal Swamp Canal where it is most needed, by moving the new road further east, creating a space between the road and the canal. Such a realignment is already planned from the angle north to the boat ramp. Our proposal is to extend this realignment another mile to the north to also bypass Wallaceton, to avoid destroying the canal's only historic buildings and cutting off the mouth of the North West Canal.

THE NEW HIGHWAY AS ORIGINALLY PLANNED WILL DESTROY WALLACETON AND ITS POTENTIAL FOREVER:

THE DESTRUCTION OF "WALLACETON": The road as originall planned will destroy the Wallace home, the only remaining early homestead on the canalbank. Built between the 1840s and 1909, it is a fascinating, rambling home which is now on the National Register of Historic Places. It must be spared to remain an historic, living, private home, or perhaps someday a living museum of plantation life in the Great Dismal Swamp.

THE COLLAPSE OF THE CANAL SUPERINTENDENT'S HOUSE: The canal's other remaining historic building, the only one officially connected with the canal, is also at Wallaceton, but it is abandoned and about to collapse. The Corps of Engineers owns the building and has stabilized the canal bank there to protect it. The canal society has been working with the Corps and the Wallaces to stabilize the building. The new highway as originally planned will not destroy this building but it will be as close to it as the present road, effectively preventing its use for anything. If the new road can be relocated to the east, this historic building could be restored and used again, perhaps as a "tea room," or perhaps as a Dismal Swamp Canal Museum, in connection with the Wallace home a few yards away.

LOSS OF A POTENTIAL HISTORIC BOAT HAVEN IN THE NORTH WEST CANAL: The road as presently planned will continue to cut off the mouth of the North West Canal, preventing the use of this historic branch line in a park or recreational setting in the future. But if the new road is moved to the east, the end of the North West Canal can be opened up again for several hundred feet. This would provide, for example, a small boat harbor away from the wash of the main canal. Boaters could stop here to visit the swamp and the museum. It could also be the location of a new boat ramp capable of launching swamp trip boats and authentic replicas such as James River Batteaux which were used early in the history of the canal. The ramp near the Feeder Ditch will only handle short boats.



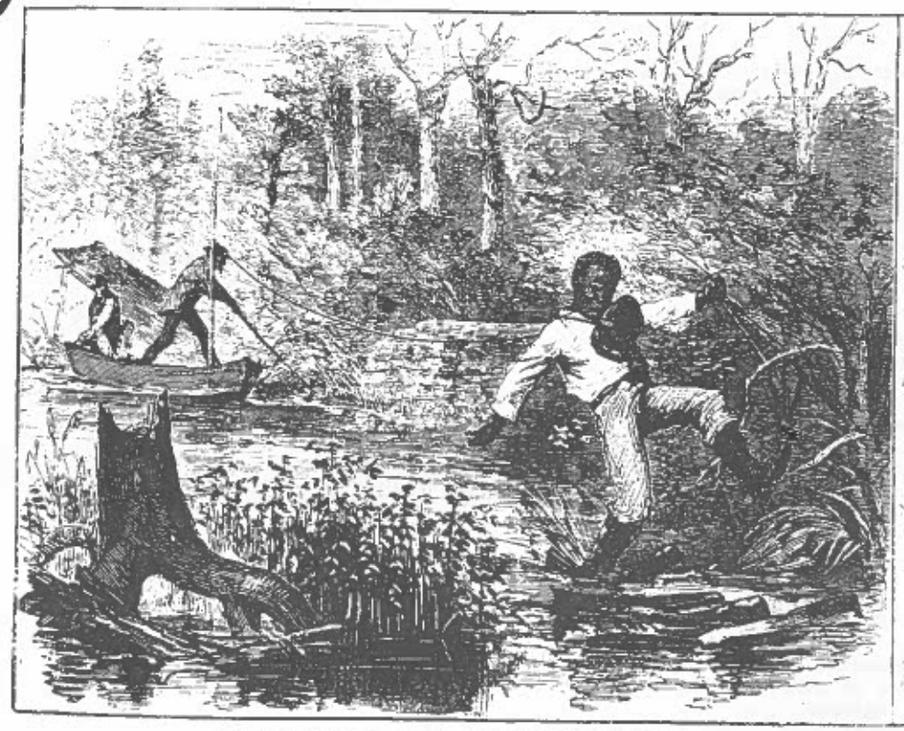
The Superintendent's House at Wallaceton in 1964 (Trout photo)

A simple, picturesque pedestrian drawbridge (to let sailboats into the harbor) could be placed across the end of the North West Canal where the original towpath bridge once was; the stone bridge abutments are still there.

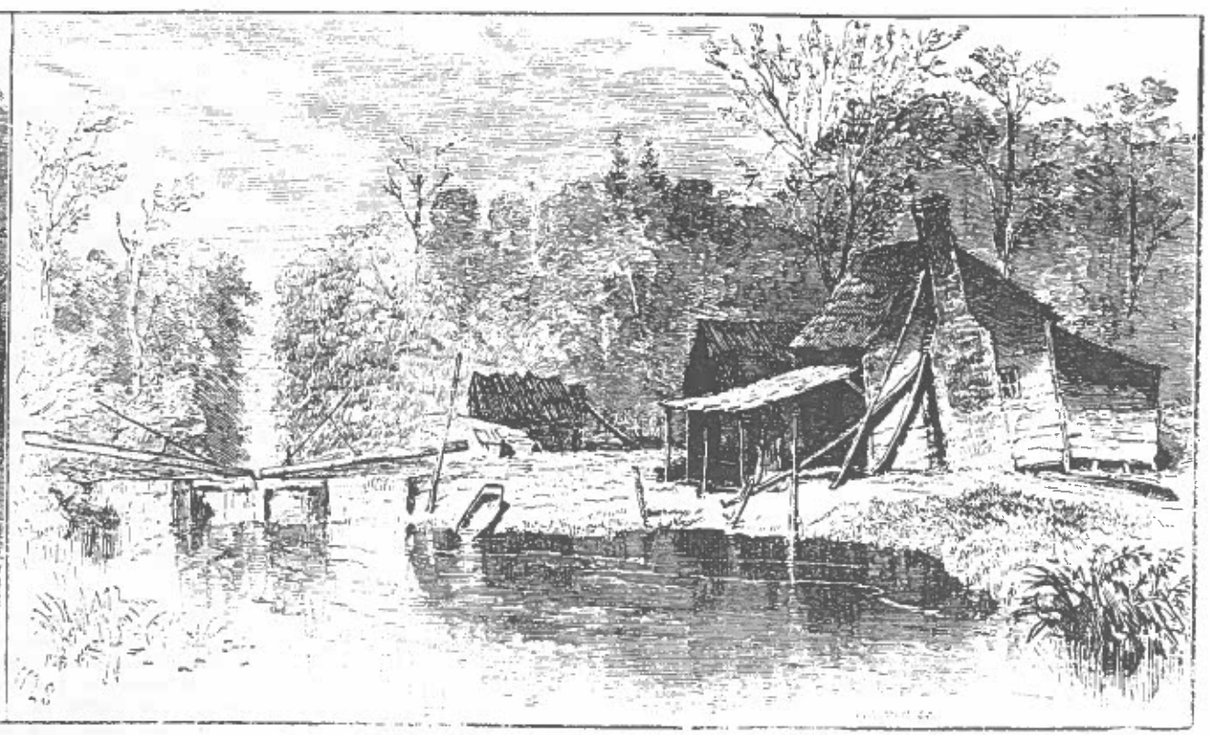
LOSS OF A FOCUS FOR HISTORICAL ACTIVITIES: The new road as planned will not leave room to use historic Wallaceton as the starting point for historical activities, but a by-pass would create room. Wallaceton could be the starting point for an historic nature trail going east along the towpath of the North West Canal, which cuts through scenic swamps in the North West River. This trail would extend the swamp experience eastward into Chesapeake; it would not require hikers to cross the Dismal Swamp Canal; and it would help take pressure off intensive use of the Dismal Swamp proper.

LOSS OF ONE OF THE LAST SURVIVING HISTORIC FEATURES ALONG THE CANAL: A trip by boat, car, bicycle or foot along the canal can be boring without points of interest, and Wallaceton is still standing. Can we afford to let it go?

SCENES ON LAKE DRUMMOND



GOING INTO THE SWAMP—A CHECK ON THE TOW.



THE LONE HOUSE.

The scenes above were drawn by W.L. Sheppard for an article on the Dismal Swamp in the June 14, 1873 HARPER'S WEEKLY (VC&NS Archives)

> The traveler has hardly seen the swamp unless he has also seen Lake Drummond. He reaches it from the Dismal Swamp Canal by the Feeder Ditch. Up this he is towed, as shown in the sketch, by a negro, who meets with endless difficulties as his craft runs her nose into the bank, or bumps heavily over a hidden log; but the good humor of his race supports him through it all.

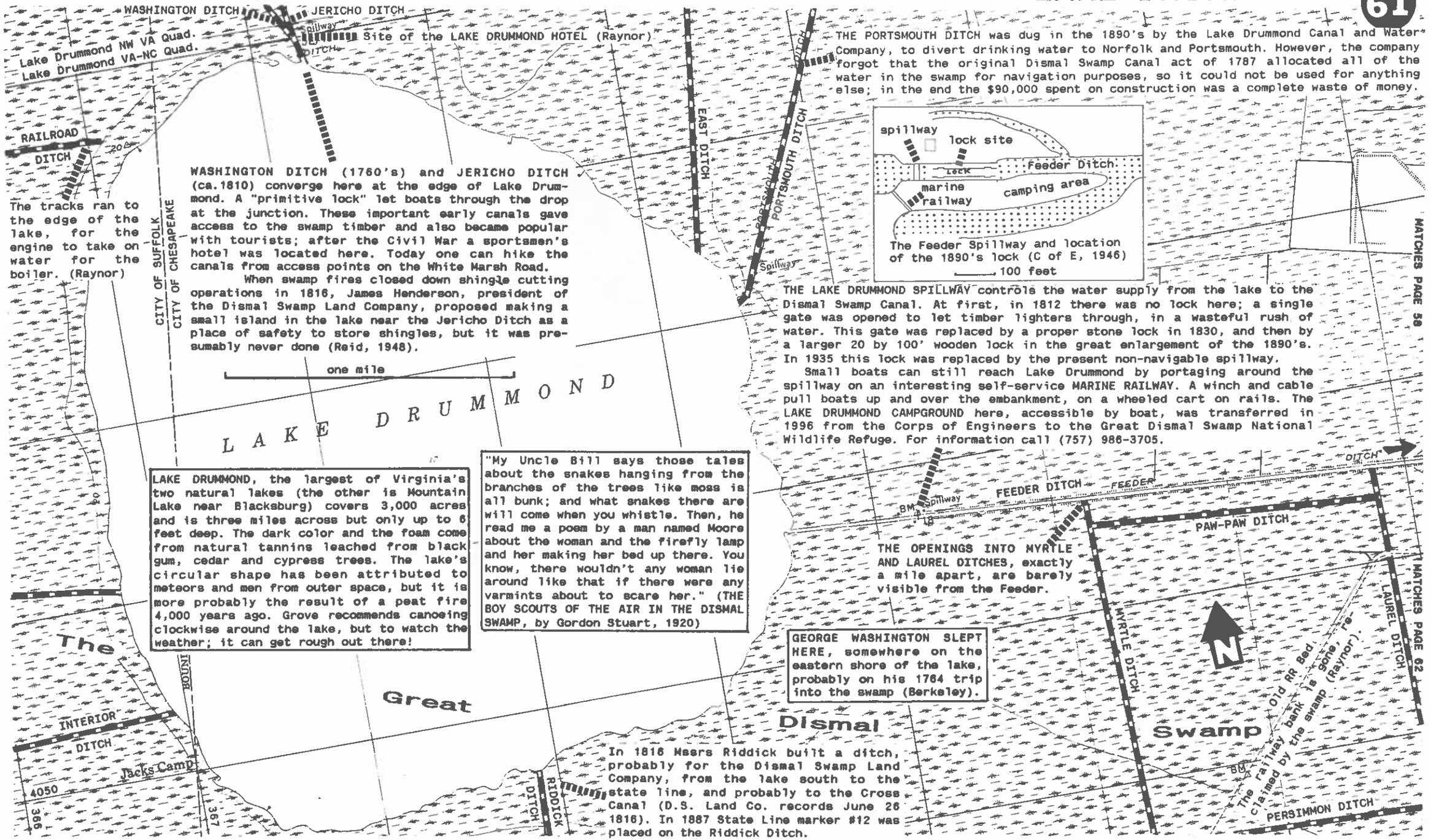
Today the traveler has to paddle himself or take a small boat up the Feeder Ditch to Lake Drummond, or walk along the Washington Ditch.

At Right: George Washington at Lake Drummond, a fanciful engraving by McNeven and Hunt courtesy of Union Camp. Washington did in fact visit the Lake, and even spent the night there on its eastern shore, probably in 1764.

"But one habitation of man, the Lone House, is upon its borders."

The "Lone House" was probably the home of the Feeder Ditch's lock-keeper. Lake Drummond was and still is the source of water for the Dismal Swamp Canal. At first, in 1812, the water spilled over a single gate here, from the lake into the Feeder, but this was soon replaced by a proper lock, of wood, to let boats through. By 1873 when the drawing above was made, it had been replaced by a stone one. In the 1890's it was replaced by a larger wooden lock, and in 1935 by a spillway. Today, small craft navigating the Feeder can reach the lake by bypassing the spillway on a small do-it-yourself marine railway.

In addition to this print, there are several known photographs of the Feeder Ditch Lock at different periods. They all need to be studied carefully to determine whether the view is up the canal toward the lake, or away from it. The view above is probably west toward the lake, which is a half-mile away through a narrow tree-lined cutting - just as it still is today.


WASHINGTON DITCH
JERICHO DITCH
Site of the LAKE DRUMMOND HOTEL (Raynor)
Lake Drummond NW VA Quad.
Lake Drummond VA-NC Quad.
RAILROAD DITCH
EAST DITCH
PORTSMOUTH DITCH
Spillway
CITY OF SUFFOLK
CITY OF CHESAPEAKE
WASHINGTON DITCH (1760's) and JERICHO DITCH (ca.1810) converge here at the edge of Lake Drummond. A "primitive lock" let boats through the drop at the junction. These important early canals gave access to the swamp timber and also became popular with tourists; after the Civil War a sportsmen's hotel was located here. Today one can hike the canals from access points on the White Marsh Road.
When swamp fires closed down shingle cutting operations in 1816, James Henderson, president of the Dismal Swamp Land Company, proposed making a small island in the lake near the Jericho Ditch as a place of safety to store shingles, but it was presumably never done (Reid, 1948).
The tracks ran to the edge of the lake, for the engine to take on water for the boiler. (Raynor)
one mile
LAKE DRUMMOND
LAKE DRUMMOND, the largest of Virginia's two natural lakes (the other is Mountain Lake near Blacksburg) covers 3,000 acres and is three miles across but only up to 6 feet deep. The dark color and the foam come from natural tannins leached from black gum, cedar and cypress trees. The lake's circular shape has been attributed to meteors and men from outer space, but it is more probably the result of a peat fire 4,000 years ago. Grove recommends canoeing clockwise around the lake, but to watch the weather; it can get rough out there!
"My Uncle Bill says those tales about the snakes hanging from the branches of the trees like moss is all bunk; and what snakes there are will come when you whistle. Then, he read me a poem by a man named Moore about the woman and the firefly lamp and her making her bed up there. You know, there wouldn't any woman lie around like that if there were any varmints about to scare her." (THE BOY SCOUTS OF THE AIR IN THE DISMAL SWAMP, by Gordon Stuart, 1920)
The Great Dismal Swamp
INTERIOR DITCH
Jacks Camp
4050
366
367
RIDDICK DITCH
In 1816 Messrs Riddick built a ditch, probably for the Dismal Swamp Land Company, from the lake south to the state line, and probably to the Cross Canal (D.S. Land Co. records June 26 1816). In 1887 State Line marker #12 was placed on the Riddick Ditch.
GEORGE WASHINGTON SLEPT HERE, somewhere on the eastern shore of the lake, probably on his 1764 trip into the swamp (Berkeley).
THE PORTSMOUTH DITCH was dug in the 1890's by the Lake Drummond Canal and Water Company, to divert drinking water to Norfolk and Portsmouth. However, the company forgot that the original Dismal Swamp Canal act of 1787 allocated all of the water in the swamp for navigation purposes, so it could not be used for anything else; in the end the $90,000 spent on construction was a complete waste of money.
spillway
lock site
lock
Feeder Ditch
marine railway
camping area
The Feeder Spillway and location of the 1890's lock (C of E, 1946)
100 feet
THE LAKE DRUMMOND SPILLWAY controls the water supply from the lake to the Dismal Swamp Canal. At first, in 1812 there was no lock here; a single gate was opened to let timber lighters through, in a wasteful rush of water. This gate was replaced by a proper stone lock in 1830, and then by a larger 20 by 100' wooden lock in the great enlargement of the 1890's. In 1935 this lock was replaced by the present non-navigable spillway.
Small boats can still reach Lake Drummond by portaging around the spillway on an interesting self-service MARINE RAILWAY. A winch and cable pull boats up and over the embankment, on a wheeled cart on rails. The LAKE DRUMMOND CAMPGROUND here, accessible by boat, was transferred in 1996 from the Corps of Engineers to the Great Dismal Swamp National Wildlife Refuge. For information call (757) 986-3705.
MATCHES PAGE 59
DITCH
FEEDER DITCH
FEEDER
BM
Spillway
PAW-PAW DITCH
THE OPENINGS INTO MYRTLE AND LAUREL DITCHES, exactly a mile apart, are barely visible from the Feeder.
MYRTLE DITCH
LAUREL DITCH
MATCHES PAGE 62
N
Old RR Bed
The railway bank is gone, reclaimed by the swamp (Raynor).
Swamp
BM
PERSIMMON DITCH

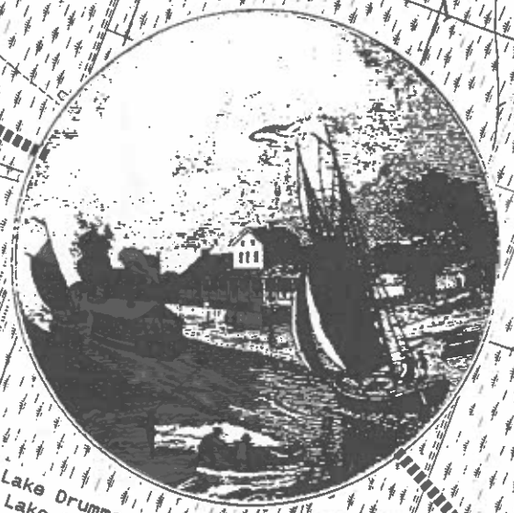
62 THE ANGLE, THE STATE LINE AND THE HALFWAY HOUSE

"The line, marked by a stone duly inscribed, bisects the little tavern. The landlord lives and votes in the Tar State. His guests are entertained in the Old Dominion. The place is a famous matrimonial rendezvous... The look-out is superb. Nothing but the natural limit of sight hides from each other pursuer and pursued. The precise number of seconds allowed to the latter for donning the manacles of Hymen may easily be learned by a sentinel."
("Loungings in the Footprints of the Pioneers," HARPER'S NEW MONTHLY MAGAZINE, May 1860, pp.724-725.)

The Halfway House is long gone but 23 miles west of here, on US 13, the STATE LINE HOUSE has had a similar reputation since the 1830's. It is now a Bed-and-Breakfast. (See p.23.)

THE LAKE DRUMMOND HOTEL, better known as THE HALFWAY HOUSE, was opened for business on Christmas Day, 1829, by Isaiah Rogerson. Located on the canal's turnpike at the state line, half in Virginia and half in North Carolina, it was ideal "for all the purposes of life, as eating, drinking, sleeping, marrying, dueling, &c. &c." It lasted at least into the late 1850s; no sign of it remains. See Pugh and Williams, THE HOTEL IN THE GREAT DISMAL SWAMP.

The site is probably directly under US 17 (Wallace). About 20 years after it closed, another LAKE DRUMMOND HOTEL had a brief existence, this time at the lake itself.



Lake Drummond SE VA-NC Quad.
Lake Drummond VA-NC Quad.

The Lake Drummond Hotel in 1831

"Since the surveyors had entered the Dismal, they had laid eyes on no living creature; neither bird nor beast, insect nor reptile came to view...the foul damps ascend without ceasing, corrupt the air, and render it unfit for respiration." (Byrd, 1728)

"We had reason to fear the many waters and sunken grounds through which we were obliged to wade...especially the Dismal, where the soil was so full of water and the air so full of damps that nothing but a Dutchman could live in them." (Byrd, 1728)

"A vast body of dirt and nastiness" (William Byrd II)
"A glorious paradise" (George Washington)

THE STATE LINE surveyed in 1728 by William Byrd was about here. In 1887 a new survey placed the line 515 feet to the south, where it is now.

STONE STATE LINE MARKER
VA / N.CA.
1887
Latitude
36°33'02"
No 11

AT ANGLE SIDING the Richmond Cedar Works' DISMAL SWAMP RAIL ROAD crossed the canal on its way from the swamp to the Works on the Elizabeth River.

THE ANGLE was not created by North Carolinians (or Virginians) digging in the wrong direction! It was part of the original design, to take the canal around low grounds in the North-West River drainage, eliminating expensive embankments.

This round island at the intersection of three ditches was a SAND TRAP to collect sand and sediment from the ditches before it washed into the Dismal Swamp Canal (Whitehurst 1993).

"The Dismal Swamp is an agony of perverted nature." John Boyle O'Reilly, quoted in SCIENTIFIC AMERICAN, March 5, 1898, p.250.

"Not even a turkey buzzard will fly over it." (William Byrd, 1728)
"The healthiest place in the known world." (Arnold, 1888)

MATCHES PAGE 61

DISMAL SWAMP CANAL WELCOME CENTER

63

THE DISMAL SWAMP CANAL WELCOME CENTER, the nation's only joint canal and highway visitor's center, was dedicated in 1989, when the canal was placed on the National Register of Historic Places. Tourist information; boat dock; canoe put-in; restrooms. Open 9-5 Tues.-Sat. (subject to change) except Thanksgiving and Christmas day; phone (919) 771-8333.

At the dock is a stone from the old CULPEPPER LOCK; on the back was an iron cramp (staple) to hold coping stones together. On the front is a plaque erected by the American Society of Civil Engineers designating the canal a National Historic Civil Engineering Landmark in 1987.

Also on display is a gas-powered engine from Moses White's logging operations.

Approximate location of FARANGE'S HOTEL, the swamp's first inn, built by Major William Farange about 1802. President James Monroe stayed there in 1818, and Virginia's Governor Gilmer in 1840.

ALL CAMDEN COUNTY NC

Joyce's Creek

Joyce Road Rt. 1225

Rt. 1225

Rt. 1231

Rt. 1233

BM 17

BM 3.2

Lilly Road

Ridge

Puddin

Culpepper Cem Road

Rt. 1233

McPherson Road Rt. 1231

N of this line, contour interval is 5 feet
Lake Drummond SE VA-NC Quad.
S of this line, contour interval is 2 meters
South Mills NC Quad.

Follow U.S.17

US 17

US 17

HIGHWAY

DISMAL SWAMP RING ROAD DOUBLE ARROWS

stone MP 19
DSC mile 30

Keeter Barn Road Rt. 1226

BM 4.1

stone MP 20

US 17

Rt. 343

DISMAL SWAMP CANAL

INTRACOASTAL WATERWAY

DISMAL

Spence Lane Rt. 1221

The Great Dismal Swamp

DISMAL SWAMP NATURAL AREA (State of North Carolina)

Lake Drummond SE VA-NC Quad.
Lake Drummond VA-NC Quad.

HAMBURG DITCH (CROSS CANAL)

HAMBURG DITCH

376

377

4037

4036

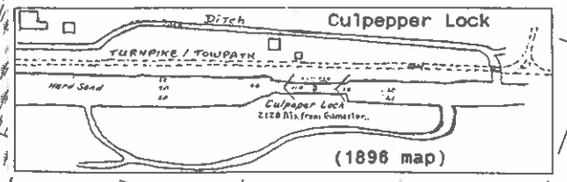
Rt. 1219

Near here, or perhaps at Spence's, was a wooden "TEMPORARY LOCK" built in 1801 to let boats use some of the canal, while it was still under construction.

"Bullock Swamp" (1917)

"THE WHITE OAK MARSH CANAL, which joins the main canal about six miles from Joyce's creek, has been completed, affording batteaux navigation from the [Dismal Swamp] canal into Gates County, in North Carolina, a distance of about nine miles" (7th BPW Report, 1822, p.35). The boats could carry up to 40 barrels (Norfolk HERALD, Sept. 2, 1822). This early canal across the swamp was also known as the CROSS CANAL and the HAMBURG DITCH.

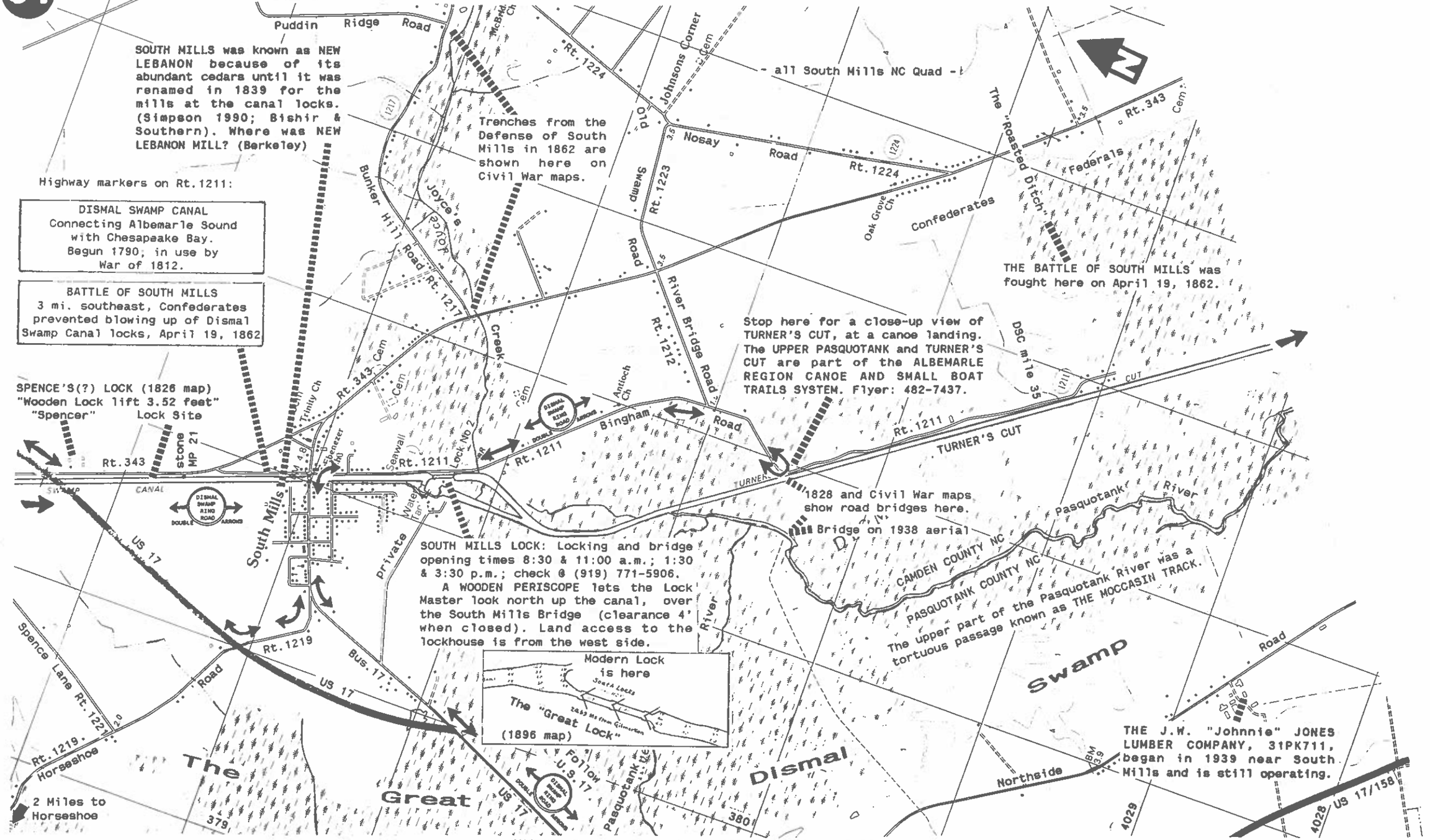
Part of a stone wall remains underwater of CULPEPPER LOCK, one of the first stone locks on the canal, built by Peter Culpepper in the 1820s (Pugh & Williams; L.B. Culpepper). When it was removed in the 1890s, many of the stones were piled on the west bank where they still are.



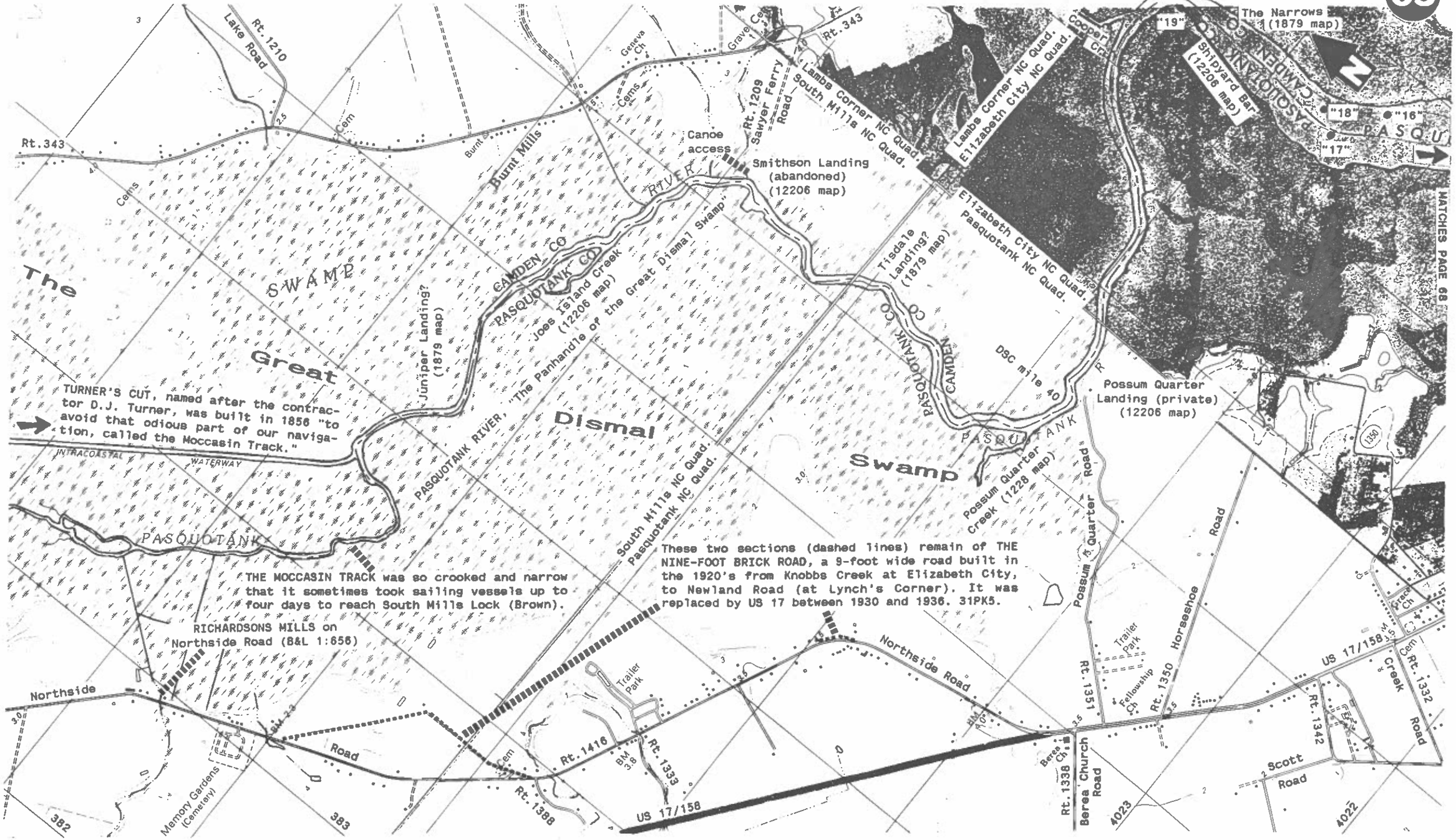
(1896 map)

Several radio transmitters along the canal which boaters and drivers could tune to, with stories about the canal and the swamp, would change a boring trip into an exciting one and keep the canal alive.

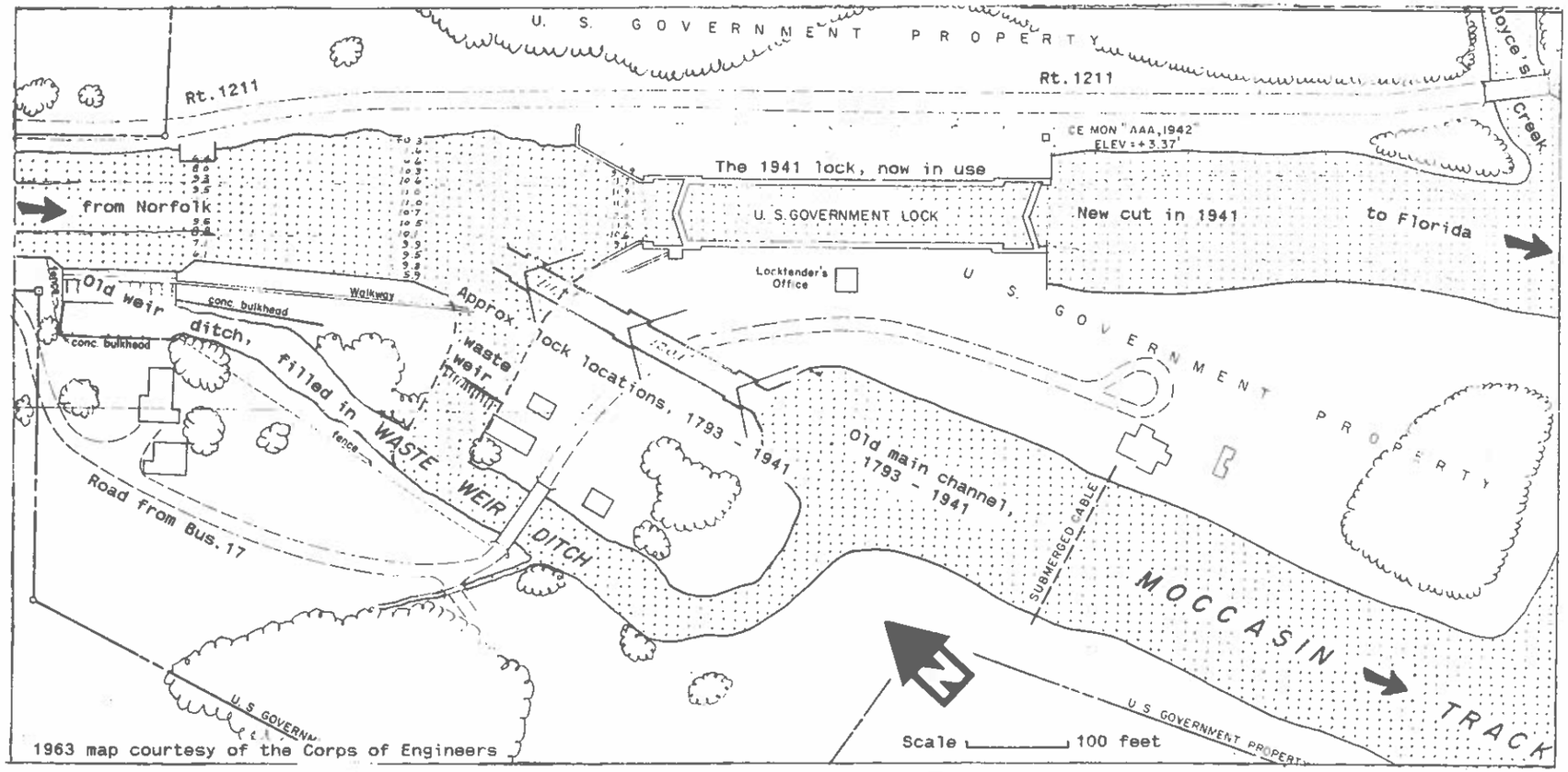
64 SOUTH MILLS LOCK

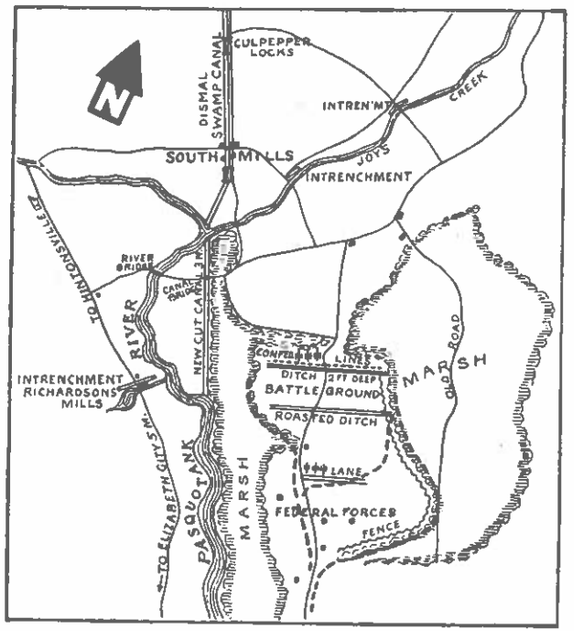

SOUTH MILLS was known as NEW LEBANON because of its abundant cedars until it was renamed in 1839 for the mills at the canal locks. (Simpson 1990; Bishir & Southern). Where was NEW LEBANON MILL? (Berkeley)
Highway markers on Rt.1211:
DISMAL SWAMP CANAL
Connecting Albemarle Sound with Chesapeake Bay.
Begun 1790; in use by War of 1812.
BATTLE OF SOUTH MILLS
3 mi. southeast, Confederates prevented blowing up of Dismal Swamp Canal locks, April 19, 1862
SPENCE'S(?) LOCK (1826 map)
"Wooden Lock lift 3.52 feet"
"Spencer" Lock Site
Trenches from the Defense of South Mills in 1862 are shown here on Civil War maps.
Stop here for a close-up view of TURNER'S CUT, at a canoe landing. The UPPER PASQUOTANK and TURNER'S CUT are part of the ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM. Flyer: 482-7437.
THE BATTLE OF SOUTH MILLS was fought here on April 19, 1862.
1828 and Civil War maps show road bridges here.
Bridge on 1938 aerial
SOUTH MILLS LOCK: Locking and bridge opening times 8:30 & 11:00 a.m.; 1:30 & 3:30 p.m.; check @ (919) 771-5906.
A WOODEN PERISCOPE lets the Lock Master look north up the canal, over the South Mills Bridge (clearance 4' when closed). Land access to the lockhouse is from the west side.
Modern Lock is here
The "Great Lock" (1896 map)
The J.W. "Johnnie" JONES LUMBER COMPANY, 31PK711, began in 1939 near South Mills and is still operating.
The upper part of the Pasquotank River was a tortuous passage known as THE MOCCASIN TRACK.
Puddin Ridge Road
Johnsons Corner
Nosay Road
Rt.1224
Rt.1223
Rt.343
Federals
Confederates
Oak Grove Ch
Bunker Hill Road
Rt.1217
Joyce's Ditch
Swamp
River Bridge Road
Rt.1212
Creek
Trinity Ch
Spencer Rd
Seawall
Lock No 2
Antioch Ch
Bingham Road
Rt.1211
TURNER'S CUT
DSC mile 35
CUT
Rt.343
stone MP 21
SWAMP CANAL
South Mills
Water Tank
private
US 17
Rt.1219
Bus.17
Spence Lane Rt.1221
Road
Horseshoe
2 Miles to Horseshoe
The Great Dismal Swamp
Follow U.S.17
Pasquotank River
CAMDEN COUNTY NC
PASQUOTANK COUNTY NC
Northside
Road
379
380
4029
4028
US 17/158
MATCHES PAGE 27
To US 158 and Rt.32 to Suffolk

TURNER'S CUT AND THE MOCCASIN TRACK



66 SOUTH MILLS, THE LOCKS AND THE BATTLE





MAP OF THE ENGAGEMENT AT SOUTH MILLS, N. C., BASED ON THE MAP ACCOMPANYING GENERAL HUGER'S REPORT.

(Map: BATTLES AND LEADERS OF THE CIVIL WAR, p.656)

SOUTH MILLS, at the southern end of the Dismal Swamp Canal, was formerly known as NEW LEBANON. No one knows now where the early wooden locks were at South Mills; as they rotted away or collapsed, they were replaced. One of the first was completed in 1801, called the GREAT LOCK. The lock chamber was probably 75 feet long and 9 feet wide for boats "like those in the James river canal" - probably pointed James River Batteaux or square-ended Gundalows.

THE FIRST STONE LOCK at South Mills was built in 1820, probably with a 96 by 18 foot chamber of stone shipped in from Richmond, Pennsylvania and New Jersey. It was intended to be a permanent structure but its high lift of 14 feet made it unstable. It was rebuilt in 1829 with a 100 by 22-foot chamber, and again in 1836, this time with two chambers to divide the lift.

This lock saw some action during the CIVIL WAR: After Federal forces invaded Albemarle Sound in January 1862 they chased the last two vessels of the Confederate "Mosquito Fleet" up the Pasquotank. The CSS BEAUFORT made it through the lock and escaped up the Dismal Swamp Canal to Norfolk, but the CSS APPOMATTOX was just two inches too wide to fit in the lock chamber, and was burned by her frustrated captain to prevent her capture.

The 1836 stone lock lasted over half a century until the great enlargement of the 1890s, when it was replaced by a large timber single-lift lock with a 250 by 40 foot chamber. Finally, this lock in its turn was replaced in 1941 by the one still in use today, with an even larger chamber, 300 by 52 feet, of steel and concrete.

What happened to the old locks? What is still buried, underground? Was a lock built beside the old one, which was then buried? Were the stone locks rebuilt in the same spot? It would be exciting to find that the 1836 stone lock, of Civil War times, is still intact underground, but maps suggest that the 1890s lock may have been built on top of it, or at least very close. However, the 1941 lock was built in an entirely new location, so the 1890s lock is probably reasonably intact, underground. The ground over the 1890s lock site was the route of a marine railway from 1954 to 1970, used during low water periods to portage small craft around the lock, saving precious water.

THE BATTLE OF SOUTH MILLS

The value of the Dismal Swamp Canal during the Civil War can be measured by the trouble taken by both sides to block or possess it. While the Confederates held the region it was a much-used supply route, fulfilling its intended role as an inland passage safe from warships on the Atlantic. When Union forces invaded Albemarle Sound in 1862, they advanced north toward South Mills Lock with the intention of blowing it up, to prevent Confederate ironclads from re-invading Albemarle Sound. On April 19, 1862 they met the Confederates three miles south of the lock.

Each side claimed a victory at the resulting BATTLE OF SOUTH MILLS (the Confederate name) or THE BATTLE OF CAMDEN (the Union name). To prevent the Federals from using a drainage ditch in the middle of the battlefield, the Confederate defenders filled the ditch with fence rails and set it on fire to make it too hot to occupy. This tactic succeeded: no one reached the lock to wreak any destruction; the ditch became known as the ROASTED DITCH or FIRE DITCH.

photo by Sonny White

Visiting yachts are offered free dockage for 48 hours. (Sonny White photo, in Coastal Cruising Guide courtesy of the Elizabeth City Chamber of Commerce.)

ELIZABETH CITY

ELIZABETH CITY, at first called SHINGLE LANDING was originally established as "Reding" in 1793. It was no coincidence that this was also the year that construction began on the Dismal Swamp Canal. Later it was called Elizabeth Town and Elizabeth City, probably after Elizabeth Tooley who donated the land in 1793 and had the first riverside tavern here at the docks - where the WATERWORKS shops are now. During the Civil War most of the town was burned down by its citizens to prevent its occupation by the Yankees.

Elizabeth City is now the major town on the Dismal Swamp Canal route and welcomes visitors with 48 hours of free dockage at MARINERS WHARF, convenient to stores and to the historic districts. Across the street the Chamber of Commerce has useful maps and local information. For a walking tour brochure write the Elizabeth City Chamber of Commerce, P.O. Box 426, Elizabeth City, NC 27907, 919-335-4365.

In a couple of years Mariners Wharf will also be convenient to the MUSEUM OF THE ALBEMARLE, 335-1435, now located three miles SW on US 17. This fascinating museum of the Albemarle region has some good material on the canal.

For more on Elizabeth City (and her blimps) see for example Fred Fearing's A PICTORIAL HISTORY OF ELIZABETH CITY; W.A. Griffin's ANTE-BELLUM ELIZABETH CITY: THE HISTORY OF A CANAL TOWN (1970); T.R. Butchko's ON THE SHORES OF THE PASQUOTANK (1989); Bishir and Southern's A GUIDE TO THE HISTORIC ARCHITECTURE OF EASTERN NORTH CAROLINA (1996); and the YEARBOOKS OF THE PASQUOTANK HISTORICAL SOCIETY.

TCOM, L.P.

"THE LIGHTER THAN AIR COMPANY"

THE BLIMPS ARE BACK

AIR DOCK NUMBER ONE (STEEL HANGER #1), 191 feet high, 958 feet long and 289 feet wide, can be seen from miles away by boaters doing the Norfolk Circle. It was erected in 1942, during WW II, to house and support six Navy "K" blimps for anti-submarine duty in the Hampton Roads - Cape Hatteras area, escorting ships, performing search and rescue missions, and even looking for moonshine stills.

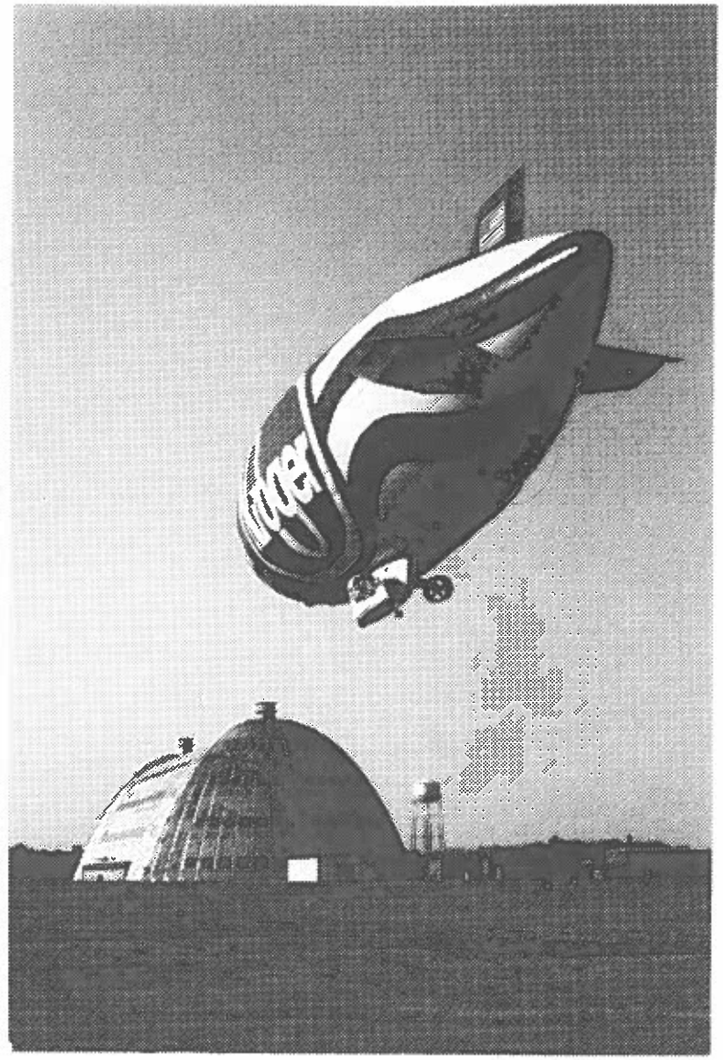
It is one of the largest buildings in the world, made of steel with rounded ends which are huge doors that open and close like orange peels. The hanger is longer than the QUEEN ELIZABETH II, and almost three times as wide.

Next to it, in 1943, was completed an even larger TIMBER HANGER #2 (Air Dock #2), 183 feet high, 1,086 feet long and 297 feet wide. It was the largest wooden structure in the world until it burned to the ground on August 3, 1995.

The Navy stopped flying blimps here in the early 1960's but in 1971 blimps were in the air again when TCOM, L.P. began building and testing airships in Air Dock #2. After the fire, they moved to Air Dock #1.

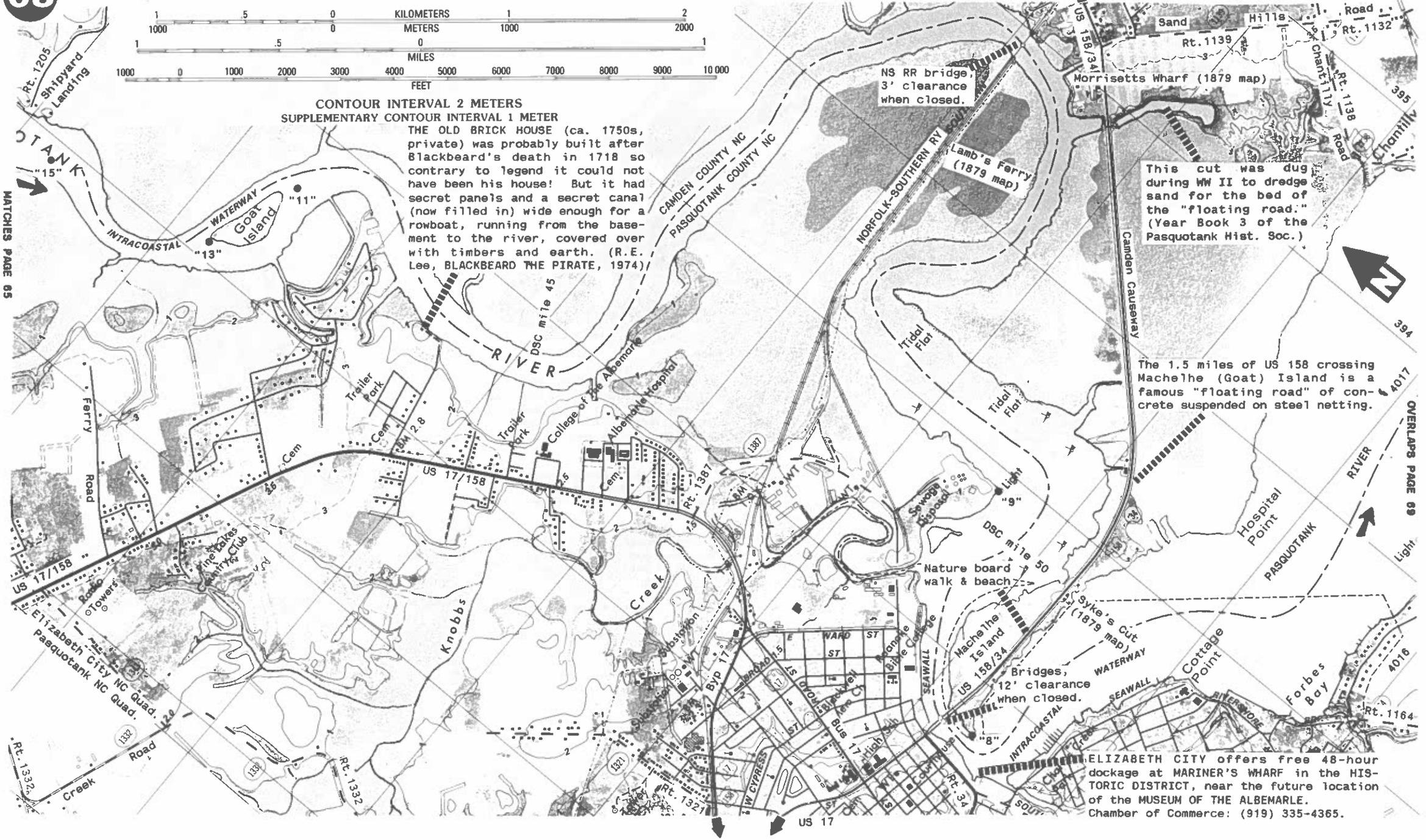
TCOM builds, tests and services blimps (you'll see them at football games) and also specializes in designing and building "aerostats." These are even larger balloons, unmanned and with a tether two or three miles long, providing a stable platform in the sky. They have been used for communications and intelligence gathering and for tracking aircraft, ships, vehicles, and the Arctic ice pack.

(Information and photo courtesy of Steve Chalker, TCOM's Senior Production Planner and local historian)

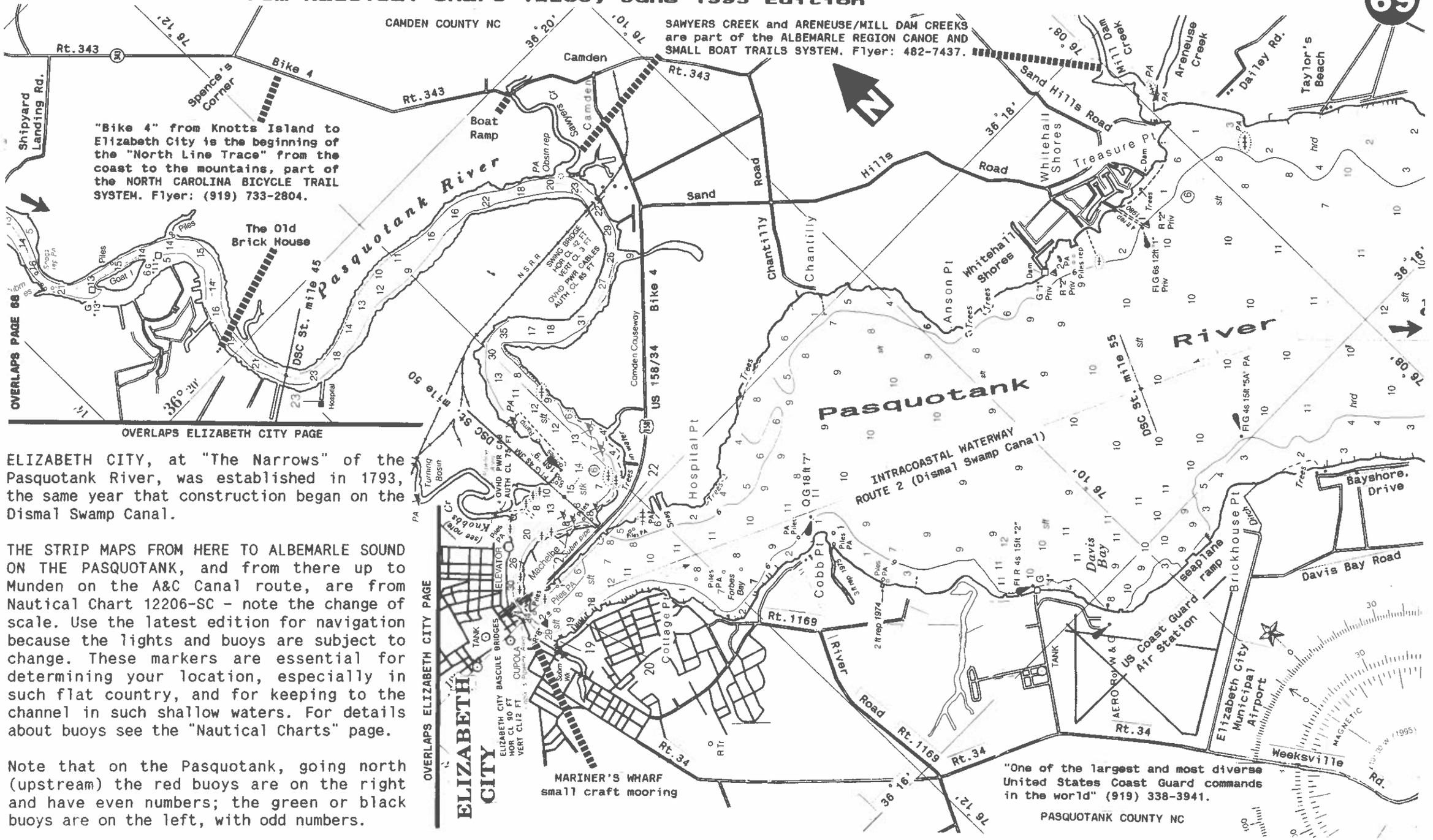


The KROGER blimp outside Air Dock #1 in 1996. If you're lucky, you'll see an airship like this while cruising the Norfolk Circle. (Steve Chalker photo)

68 ELIZABETH CITY



From Nautical Chart 12206, June 1995 Edition



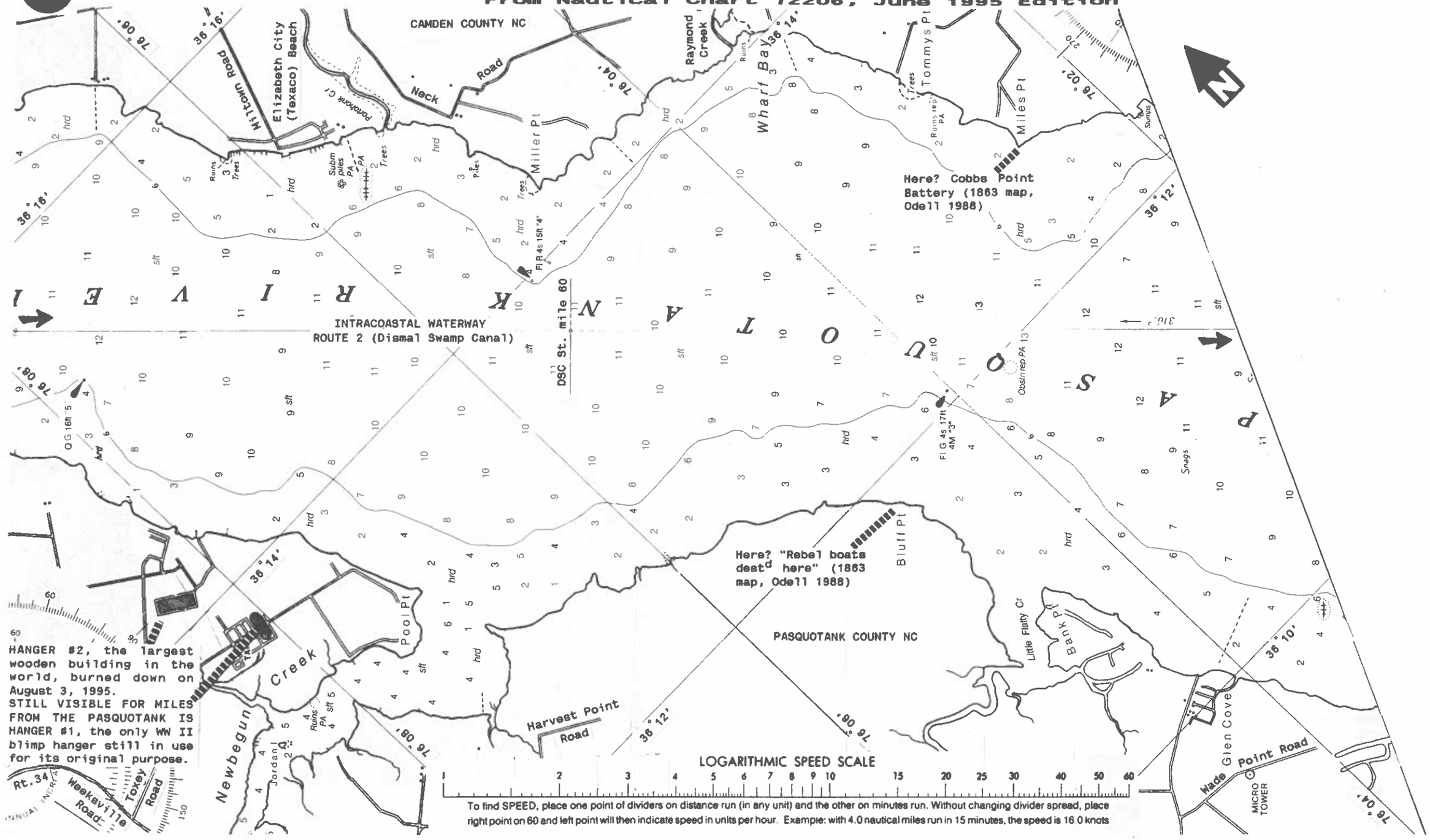
ELIZABETH CITY, at "The Narrows" of the Pasquotank River, was established in 1793, the same year that construction began on the Dismal Swamp Canal.

THE STRIP MAPS FROM HERE TO ALBEMARLE SOUND ON THE PASQUOTANK, and from there up to Munden on the A&C Canal route, are from Nautical Chart 12206-SC - note the change of scale. Use the latest edition for navigation because the lights and buoys are subject to change. These markers are essential for determining your location, especially in such flat country, and for keeping to the channel in such shallow waters. For details about buoys see the "Nautical Charts" page.

Note that on the Pasquotank, going north (upstream) the red buoys are on the right and have even numbers; the green or black buoys are on the left, with odd numbers.

70 THE BLIMP HANGER

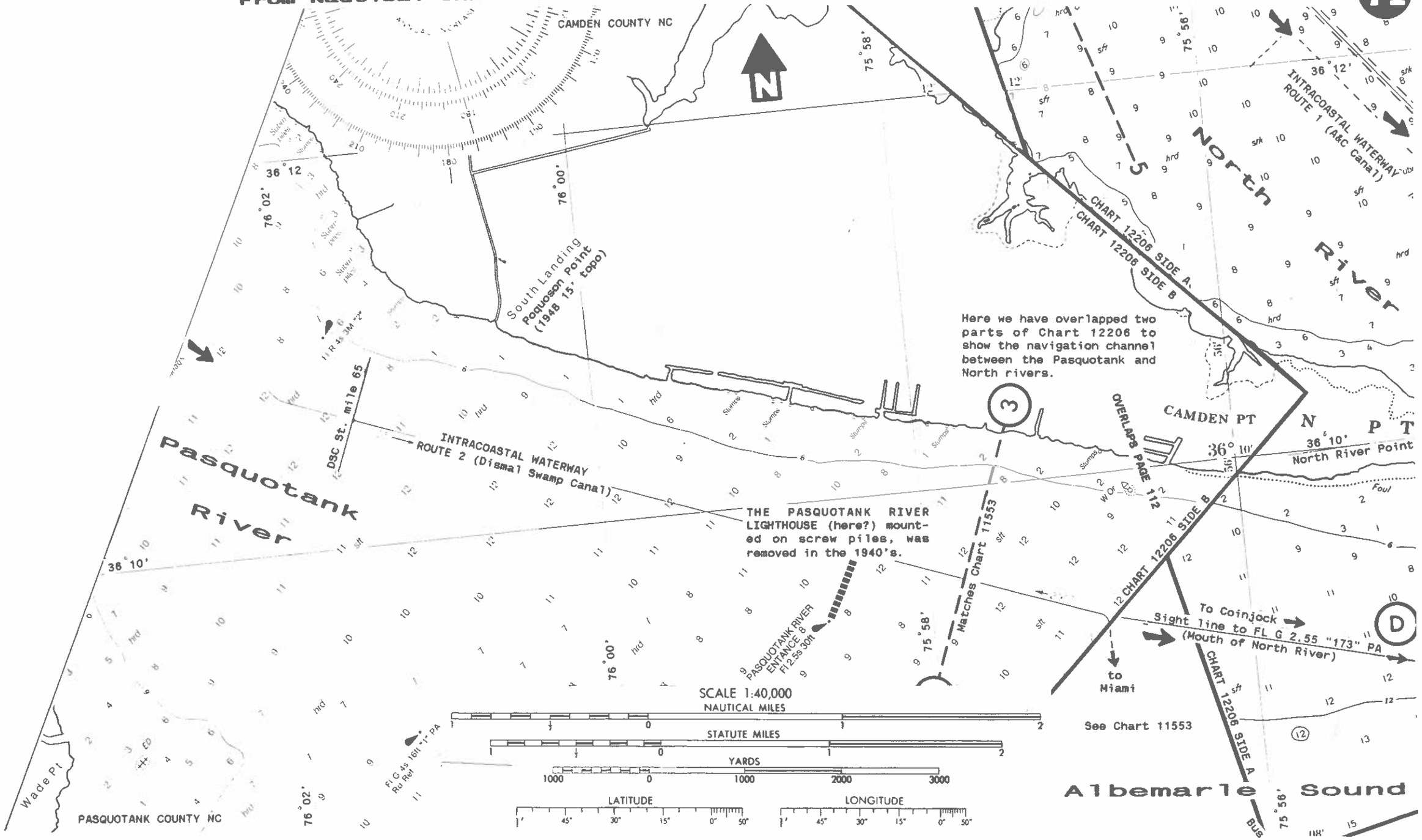
From Nautical Chart 12206, June 1995 Edition


CAMDEN COUNTY NC
Elizabeth City (Texaco) Beach
Milltown Road
Neck Road
Pondfork Cr
Miller Pt
Raymond Creek
Wharf Bay
Tommys Pt
Miles Pt
Here? Cobbs Point Battery (1863 map, Odell 1988)
INTRACOASTAL WATERWAY
ROUTE 2 (Dismal Swamp Canal)
DSC St. mile 60
PASQUOTANK RIVER
Here? "Rebel boats destd here" (1863 map, Odell 1988)
Bluff Pt
PASQUOTANK COUNTY NC
Little Flatty Cr
Bank Pt
Pool Pt
Newbegun Creek
Harvest Point Road
Glen Cove
Wade Point Road
MICRO TOWER
Rt. 34
Weeksville Road
Toxey Road
LOGARITHMIC SPEED SCALE
1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60
To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots

HANGER #2, the largest wooden building in the world, burned down on August 3, 1995.
STILL VISIBLE FOR MILES FROM THE PASQUOTANK IS HANGER #1, the only WW II blimp hanger still in use for its original purpose.

MOUTH OF PASQUOTANK

From Nautical Chart 12206, June 1995 Edition



72 THE DISMAL SWAMP CANAL

The Dismal Swamp Canal: "to render this the most favoured Country in the Universe"

After nearly two centuries of existence, the Dismal Swamp Canal is still very much a going concern, used by yachts navigating the Intracoastal Waterway and by excursion boats entering the Great Dismal Swamp National Wildlife Refuge. Although it has changed much over the years, the canal may lay claim to being "the oldest surviving artificial waterway in the United States."[1] As pointed out by Alexander Brown, the idea was first proposed by William Byrd while surveying the Virginia-North Carolina dividing line through the swamp in 1728; so it was not first proposed (and it never was surveyed) by George Washington, who at first considered such a canal too expensive, but later supported it wholeheartedly, subscribed to $500 in shares, and told Patrick Henry that the canal would "render this the most favoured Country in the Universe."[2]

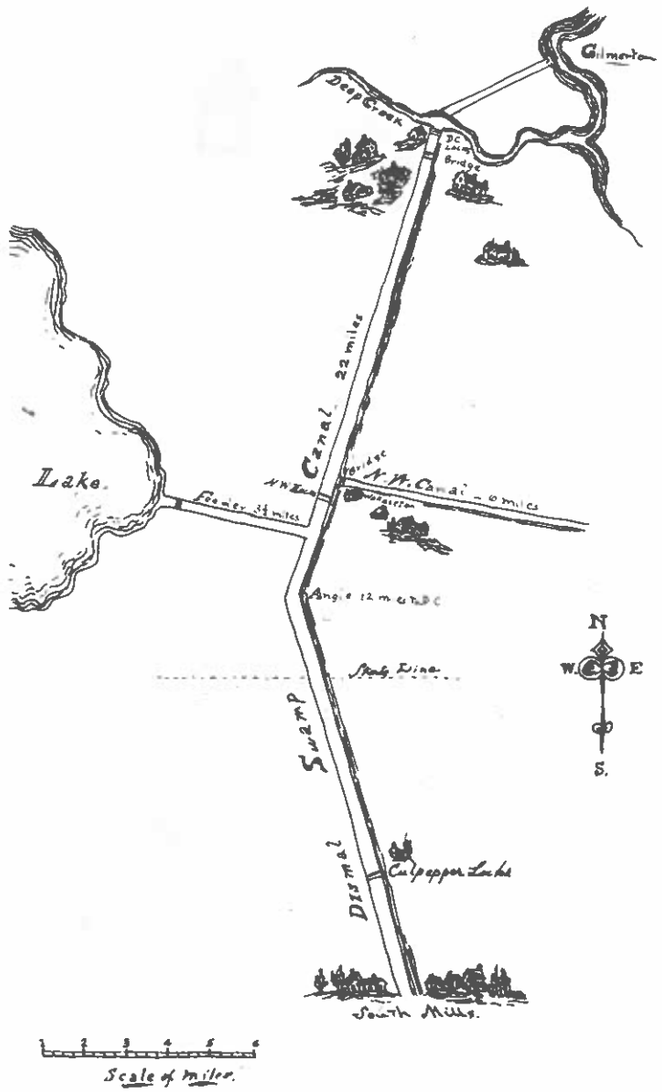
Because of this canal, Norfolk became the natural commercial outlet for North Carolina's Albemarle Sound region, which was landlocked by shifting coastal shoals and had no great port of its own. Albemarle Sound was also the outlet of the vast Roanoke-Dan-Staunton River valley which covers much of southern Virginia, so it is not too surprising that one of the most eloquent voices in favor of the Dismal Swamp Canal was none other than Virginia's Governor, Patrick Henry, who happened to have a home, Red Hill, on the Staunton River.

The Virginia General Assembly authorized a study of the canal in 1784, and established the Dismal Swamp Canal Company in 1787 with the provision that the North Carolina legislature did likewise, because the Dismal Swamp Canal was an interstate project which required interstate co-operation and

---

1. For more details see Alexander Crosby Brown's highly readable book THE DISMAL SWAMP CANAL, Norfolk County Historical Society of Chesapeake, 1970, at present out-of-print. Unless otherwise indicated, the material in this section is from his book. Also of special interest is "Man and the Great Dismal" by Edmund and Dorothy Berkeley, Virginia Journal of Science, Fall 1976, pp.141-171, a good summary of the human history of the swamp; and The Great Dismal Swamp, edited by Paul W. Kirk, Jr., a 427-page compendium of historical and scientific studies published in 1979 by the University Press of Virginia for the Old Dominion University Research Foundation.

2. G. Fitzpatrick, The Writings of George Washington 27:334, Nov. 30, 1785. Featured in The Missing Link: The Dismal Swamp Canal and the Evolution of the United States, 1728-1828, 76 pp., April 15, 1983, a delightful Duke University thesis by Mary Lee Kerr (VC&NS Collection).



This picturesque map of the canal, with sketches of houses along the route, is said to date back to August 4, 1812 when land was condemned to build the Feeder Ditch. But in its present form the map shows the canal as it was after 1843 when the Gilmerton Cut was added and the Wilkins and Culpepper Locks removed. The original copy was found in the 1950's by Mallory Hope Ferrell, blowing across a field from an abandoned building near Holland, Virginia. (Reproduced with permission from THE GREAT DISMAL, by Betty Hathaway Yarborough, Norfolk County Historical Society of Chesapeake, 1965)

funding.[3] The North Carolinians were understandably reluctant to support a project which would give their business to another state,[4] but after an abortive attempt to maintain a navigable cut through Albemarle Sound's coastal sandbars they finally authorized the Dismal Swamp Canal Company in North Carolina in 1790. Now the company could get to work: shares were sold and construction began at both ends in 1793.

The 1787 act allowed the company to build "as many locks as necessary." The canal builders must have been fully aware that there was a one-lock drop from the swamp to sea level at each end, but it is clear that at that time no one had any idea that it would eventually require at least eight locks: four up to the summit and four down. Washington thought that "there was not a difference of more than two feet between one part of the Swamp and another."[5]

Even as late as 1796, after three years of construction, the company was still feeling its way along as it penetrated deeper into the swamp. As an early visitor remarked, "What must appear very surprising, is, that, for this canal, which already seems to be in such a state of forwardness, no levels have been taken."[6] The company was eventually to find that the canal summit level was 21 1/2 feet above low tide in Deep Creek, and that Lake Drummond was three feet higher than this.[7]

The surveyors may not have done their levels, but they did have reasonably good maps of the swamp and they knew that the

---

3. Daniel J. Elazar, The American Partnership: Intergovernmental Co-operation in the Nineteenth-Century United States, Univ. Chicago Press, 1962, Ch.3: "The Dismal Swamp Canal."

For more on the Roanoke Navigation see Philip M. Rice, "The Early Development of the Roanoke Waterway - A Study in Interstate Relations," North Carolina Historical Review, XXXI, No.1, January 1954, pp.50-74; The Roanoke Canal (1987) by Peggy Jo Cobb Braswell, Roanoke Canal Commission, City Hall, Roanoke Rapids, NC 27870; and "The Roanoke Navigation: Taming the River of Death," by W.E. Trout, III, in The Journal of Rockingham County [NC] History and Genealogy, Oct. 1978, pp.39-57.

4. A protest ca. 1790 was published in the State Records of North Carolina 21:1082-1083.

5. John C. Fitzpatrick, The Writings of George Washington, Washington, 1931, XXVII, p.379, Letter addressed to Hugh Williamson, dated Mount Vernon, March 31, 1784, cited by Brown, DSC, p.28.

6. LaRochefoucauld-Liancourt, Travels through the United States of North America,..., 1795, 1796, 1799, (London, 1799), II, pp. 7-8, cited by Brown, DSC, p.35.

7. These levels vary according to the source used; the above are from Brown, Juniper Waterway, p.20. In 1899 the summit level was cut down to 12 feet.

canal could not be perfectly straight. A cut from the headwaters of the Elizabeth River, down to the headwaters of the Pasquotank, would have to bend around the headwaters of the North West River to avoid crossing it by costly embankments and aqueducts. Therefore from the beginning the canal was planned as two straight cuts meeting at "The Angle" just north of the state line - thus disposing of the romantic tradition that either the Virginians digging toward the south, or the North Carolinians digging north, got their compass directions slightly wrong so the two cuts didn't meet head on![8]

George Washington was right when he predicted in 1784 that "to attempt such a canal...would in my opinion be tedious and attended with an expense which might prove discouraging." Work on the cut was excruciatingly slow. After three years, five miles had been dug at each end; after 11 years (in 1804) a mile and a half was still to be done. In an open letter to the company in 1808,[9] a stockholder complained,

> What may I ask have you performed? - You have marked the course of the canal it is true - You have made an indifferent road, and a boat can swim empty four or five miles in the centre of the Dismal Swamp! All this you have performed in little more than sixteen years!

The canal took so long abuilding that old locks decayed and had to be rebuilt even before the canal was ever finished; and to add to the confusion, at least one "temporary lock" was built to open up a newly cut section to navigation. The early records mention new locks now and then, but obviously not all of them, and they seldom provide us with the lock dimensions. Because of all this, and because of the complete reconstructions of the canal during its long active life, the evolution of the Dismal Swamp Canal was more complex than that of most canals especially in its early stages.

The original 1787 act called for lock chambers 90 feet long and 32 feet wide, and a canal the same width and 8 feet deep. Perhaps (as was done later) passing places were planned for large boats going in opposite directions. But this width must have been found impractical, because the 1790 act amended it to 15 feet - and we learn that in 1807 the locks which had been constructed were only 75 feet long and 9 feet wide!

Such long narrow locks call for long, narrow boats, so it is not surprising to learn that the earliest craft on the canal were referred to as "batteaux", probably the same type as the replicas now participating in the James River Batteau Festival:

(Continued on page 74)

---

8. As reported in J.C. Platt, Lake Drummond Canal & Water Company, (1894) Appendix A: History of the Dismal Swamp Canal, p.3 (Mariners Museum).

9. Emmerson, "Dismal Swamp Canal" clipping collection (Mariners Museum): Norfolk Gazette & Public Ledger, April 14, 1808.

GOV. PATRICK HENRY TO GOV. CASWELL.

[From Executive Letter Book.]

RICHMOND, Jany. 25th, 1786.

SIR:

I have the honor to transmit to your Excellency the proceedings of an Assembly on the subject of opening a navigable Canal from the waters of your State to those of Elizabeth River. This matter, so interesting to the Southern Inhabitants of Virginia as well as their Neighbours of Carolina, with whom they have a Community of Interests, I have to request you will please to lay Before the legislature early as possible, in Order that it may receive that attention which it deserves.

With great regard I am Sir,
Your Excellency's most Humble Servt.,
P. HENRY.

Wm. Ronalds, Esqr., and Mr. Robert Andrews are appointed our Commissioners.

ABOVE: Virginia Governor Patrick Henry had a special interest in the Dismal swamp Canal, as well as in the navigation of the Roanoke River, which happened to pass by his plantation, Red Hill.
(From STATE RECORDS OF NORTH CAROLINA 18:509)

BELOW: A call for contractors to dig the canal went out in 1792. This one is from the March 31, 1792 GAZETTE OF THE UNITED STATES, published in Philadelphia. (Courtesy of Robert Vogel)

Dismal Swamp Canal Company.

PROPOSALS for cutting a Canal from the waters of Elizabeth River in Virginia, to those of Pasquotank in North-Carolina, or for conducting the work, will be received until the ninth day of April next, by Robert Andrews, of Williamsburg; Thomas Newton, jun. and Daniel Bedinger, of Norfolk, in Virginia; by John Cowper, of Gates County; and Benjamin Jones, of Camden County, in North-Carolina. The length of the Canal will be about fixteen miles; the country through which it will pafs, is fwampy, free from ftones, and covered with heavy wood. The Canal is to be thirty-two feet in width, and eight feet at leaft in depth, below the furface of the earth, and capable of being navigated in dry feafons, by veffels drawing three feet water.

Good fecurity will be required of contractors; and perfons making application to be employed as managers, muft produce certificates (from characters of refpectability) of their qualifications for a bufinefs of this kind.

By order of the Prefident and Directors,
WILLIAM A. BAYLEY, Clerk.

Norfolk, January 21, 1792. (eptg4)

17. *Be it enacted*, That the said lake, so far as the waters thereof shall be necessary for the purpose aforesaid, shall be and is hereby vested in the proprietors of the said canal, and it shall and may be lawful for the said president and directors, or a majority of them, to open, if they shall find it expedient, a cross canal from the lake to the principal canal, for the purpose of drawing from thence a supply of water; and for executing this work and keeping it in repair, they shall have the same powers which they are authorised to exercise in opening the principal canal. And it shall not be lawful for any person whatsoever so to cut off or divert the courses of those waters, which now flow from the westward into the said lake, as to prevent their continuing to fall into it.

To cut a cross canal to Drummond's Lake: restrictions as to diverting water.

18. And whereas some of the places, through which it may be necessary to conduct the said canals, may be convenient for erecting mills and other water works, and the persons, possessors of such situations, may design to improve the same, and it is not the intention of this act to interfere with private property, but for the purpose of improving and perfecting the said navigation,

Not to interfere with private property.

19. *Be it enacted*, That the water or any part thereof, conveyed through the said canals, shall not be used for any purpose but navigation, unless there shall be sufficient to answer both the purposes of navigation and water works aforesaid, in which case the said president and directors, or a majority of them, are hereby empowered and directed to enter into reasonable agreements, with the proprietors of such situations, concerning the just proportion of the expenses of making the canals capable of carrying such quantities of water, as may be sufficient for the purposes of navigation, and, also, for any such water works as aforesaid.

Water to be used for navigation only, except when a surplus.

THE DISMAL SWAMP CANAL'S ORIGINAL 1787 ACT, sections 17-19

From ACTS OF THE [VIRGINIA] GENERAL ASSEMBLY RESPECTING THE DISMAL SWAMP CANAL COMPANY, Norfolk, 1840, pp.11-12. An almost identical act was passed by North Carolina in 1790.

The Lake Drummond Canal and Water Company spent $90,000 in the 1890's to build the Portsmouth Ditch, to drain drinking water from Lake Drummond to Portsmouth. But this part of the Dismal Swamp Canal's original 1787 act prohibited such a canal, making the Portsmouth Ditch a complete waste of money.

The act which established the Great Dismal Swamp National Wildlife Refuge in 1974 provided that the waters of Lake Drummond would be utilized first for conservation needs of the refuge and second for navigation in the canal or for any other purpose. The American Canal Society has long supported this policy of restricting water to the canal during dry periods when it was needed for the health of the swamp.

After a length of time [the company] accomplished the long sought object, as far at least as to open a tolerable batteau navigation from end to end of the canal.[10]

Boats like those used in the James river canal, are now employed on each end of the Canal, and only the middle is now to be cut which in one good summer may be completed.[11]

The early locks mentioned in the company reports include a "Great Lock" completed in 1801 at the south end (presumably where South Mills Lock is now). At that time, a canal capable of handling boats up to 5 feet wide and with 2 foot draft had been completed from this lock south to the Pasquotank, and a canal 11 feet wide and 2 feet deep had been completed north from the lock to the Virginia line. A small temporary lock on the canal "some distance" north of the Great Lock raised the water level so boats could use that part of the canal.[12]

Three years later the 1804 report mentioned the need for three more locks. In 1807, two locks were mentioned, one 3 1/2 miles south of Deep Creek and the other 6 miles from the south end, both 9 by 75 feet and of squared Juniper timbers. The 1807 report also mentioned the need for a lock near the North West River and for others at the ends of the canal; perhaps by then the "Great Lock" at the south end had rotted away!

The later enlargements of the canal have entirely removed all of these wooden locks, as far as we know, except for the remains of three locks dating from 1830 on a branch called the North West Canal, which is described in Part 4 of this atlas. Archaeological studies of these locks should tell us something about the Dismal Swamp Canal's earliest structures.

Finally, in 1805, the company proudly announced that

During this year a junction has been effected betwixt the waters of Elizabeth River and Pasquotank...The canal is cut to its full width and depth (except about 4 miles cut full depth but half width)...It is navigable to admit shingle flats to pass the whole distance river to river.[13]

We can say, then, that 1805 is the year of the canal's first opening to through navigation, although it was still far from complete, requiring further cutting and more locks

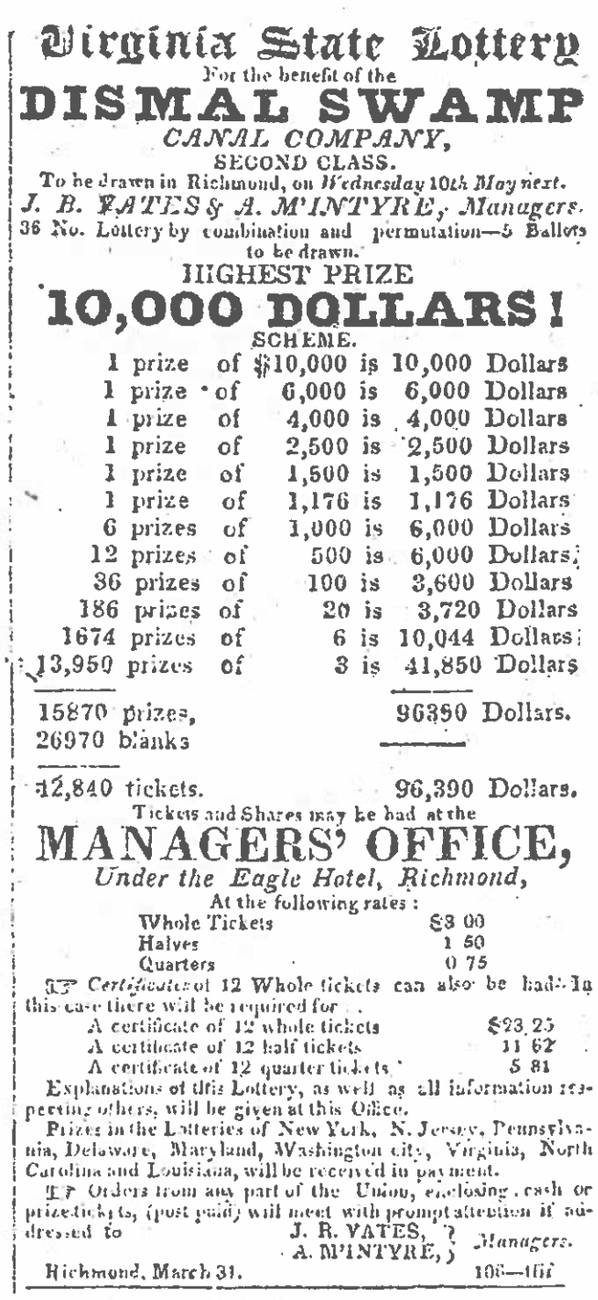
---

10. 1816 Report, Virginia Board of Public Works (BPW), p.7 (Appendix A).

11. Thomas Newton to the Governor, Nov. 17, 1801 (IX, 221-222, Calendar of Virginia State Papers.)

12. Was this lock the same as "John Spence's Lock" mentioned in 1808? Blow Papers, 14 May 1808 (William & Mary) cited by Berkeley, p.155.

13. Fitzpatrick, Writings of G.W., XXVII, p.380.



Virginia State Lottery

For the benefit of the

DISMAL SWAMP

CANAL COMPANY,

SECOND CLASS.

To be drawn in Richmond, on *Wednesday 10th May next.*

J. B. YATES & A. M'INTYRE, Managers.

36 No. Lottery by combination and permutation—5 Ballots to be drawn.

HIGHEST PRIZE

10,000 DOLLARS!

SCHEME.

1	prize	of	$10,000 is	10,000 Dollars
1	prize	of	6,000 is	6,000 Dollars
1	prize	of	4,000 is	4,000 Dollars
1	prize	of	2,500 is	2,500 Dollars
1	prize	of	1,500 is	1,500 Dollars
1	prize	of	1,176 is	1,176 Dollars
6	prizes	of	1,000 is	6,000 Dollars
12	prizes	of	500 is	6,000 Dollars
36	prizes	of	100 is	3,600 Dollars
186	prizes	of	20 is	3,720 Dollars
1674	prizes	of	6 is	10,044 Dollars
13,950	prizes	of	3 is	41,850 Dollars
15870	prizes,			96390 Dollars.
26970	blanks			
42,840	tickets.			96,390 Dollars.

Tickets and Shares may be had at the

MANAGERS' OFFICE,

Under the Eagle Hotel, Richmond,

At the following rates:

Whole Tickets	$3 00
Halves	1 50
Quarters	0 75

☞ *Certificates* of 12 Whole tickets can also be had. In this case there will be required for

A certificate of 12 whole tickets	$23 25
A certificate of 12 half tickets	11 62
A certificate of 12 quarter tickets	5 81

Explanations of this Lottery, as well as all information respecting others, will be given at this Office.

Prizes in the Lotteries of New York, N. Jersey, Pennsylvania, Delaware, Maryland, Washington city, Virginia, North Carolina and Louisiana, will be received in payment.

☞ Orders from any part of the Union, enclosing cash or prize tickets, (post paid) will meet with prompt attention if addressed to J. B. YATES, } *Managers.*
A. M'INTYRE, }

Richmond, March 31. 106—4tif

Lotteries helped finance the building of the Dismal Swamp Canal. This announcement was discovered on a fragment of a Richmond paper dated April 11, 1826, used as a divider in the Amelia Court House Land Book for 1826-1832.

to reach its desired state. For a number of years it was still navigable only by shallow draft flat boats carrying shingles out of the swamp; these boats were 30 to 40 feet long, 4 to 6' wide, and with a draft of 18 to 25 inches.[14]

Finally, in 1812, the company reported that it was building the last lock on the canal, making a total of nine, all of Juniper timber, each 15 feet wide, 90 feet long and 7 feet deep, for boats up to 82 feet long and three feet draft. The canal by this time was 22 feet wide and 6 feet deep, allowing boats 14 feet wide to pass (presumably with passing places). Through navigation along the 22 mile cut was expected to take 9 hours, which means that the expected rate of travel was 2 1/2 miles an hour.

The grand opening of the canal was a grand occasion, attended by Governor Barbour:[15]

I will state that on the 30th of April [1812], by request I visited the Dismal Swamp Canal and witnessed the consummation of 20 years' labor on the completion of that extensive and public spirited undertaking, and in company with the President, Directors, and a host of the respectable citizens of Norfolk, we witnessed the Junction of the waters of the Sound and of the Chesapeake, and passed from one to the other in a boat containing 10,000 shingles, amidst the shouts and applauses of the spectators.

It was also in 1812 that the Feeder Ditch was constructed. Originally it was hoped that seepage from the swamp would keep the Dismal Swamp Canal filled, but this was not so. Fortunately, a feeder canal from Lake Drummond had been foresightedly authorized by the original act of 1787, so the company went ahead, purchased a 3 1/2 mile-wide strip of 124 1/2 acres of swampland at one cent per acre, and completed the feeder ditch in record time. The canal's engineer stated that "Drummond's Lake... is a most beautiful sheet of water, covering about 16,000 acres of land, and averaging 12 or 13 feet in depth, from which it is never known to vary more than a few inches... I suppose a more natural and ample reservoir is not to be found attached to any Canal in the world."[16]

The Dismal Swamp Canal was a towpath canal. We know there were stables for the mules at Wallaceton[17] and there must have been others along the canal line. The towpath was also the company's toll road: the "causeway" - the company's

---

14. Calendar of Virginia State Papers, IX, pp.460-461; House Journal, 1812.

15. Report of His Excellency Governor Barbour to the Council of State, Calendar of Virginia State Papers, X, p.138.

16. 1820 Report, BPW, p.17.

17. Brown, DSC, p.111.

"Public Staging to the Southward"[18] - had been complete since 1804. Unpowered craft had to be towed by mules from this road, if they were not towed by sail or steam vessels. In 1835, sailing was forbidden in the canal because sailboats damaged the banks and other vessels.[19] Of course, once the boats left the canal and entered the Elizabeth or Pasquotank river, there was no towpath, so all craft had to sail or steam or catch a tow.

In June of 1814 the feeder, and probably more locks, were complete and the canal was finally deep enough for the first recorded passage of a craft bigger than a shingle flat - a twenty-ton boat carrying bacon and brandy to Norfolk. A year later there was another celebrated "first" - a batteau from Long Island on the Staunton River, which made a 340-mile journey down to Albemarle Sound and up the canal to Norfolk to advertise the feasibility of building a navigation system up the Roanoke. The crew presented a well-traveled barrel of flour to Norfolk as a sample of the benefits to come from the huge Roanoke River watershed.[20]

Stone Locks: The First Enlargement

The incomplete state of the canal made it of limited usefulness during the War of 1812, but the war spurred renewed interest in inland navigation and canals generally, and especially in the speedy completion of the Dismal Swamp Canal as a strategic coastal shipping route far enough inland to be safe from enemy warships. The canal would also serve as an escape route for craft which might become bottled up by a siege of Norfolk harbor, as had happened during the Revolution.

This stimulus - and the general canal fever in America - finally put the canal on its feet. Money was obtained by a series of Dismal Swamp Canal lotteries beginning in 1816. Anyone could buy a ticket - or a fraction of one - with the chance of winning a considerable prize.[21] More funding came later from the Virginia State Legislature. The United States Congress even bought 600 shares of the company's stock. With this kind of support the canal finally came out of its dark ages and became a going concern.

With money in hand again, the canal was enlarged and rebuilt, this time with permanent stone locks on wood foundations. The early locks had been of necessity made of wood:[22]

> The locks were in the first instance made of timber; and indeed it would have been impossible then to transport stone to the lock-sites for the purpose of making them of this material. The substitution of stone locks instead of wooden ones has been progressing for several years past.

Stone is not native to the swamp region, so it had to be imported. The 1820 report[23] provides an unusually detailed description of one of the locks:

> The stone lock, which is nearly finished at Deep Creek, appears to be well executed: the chamber is 96 feet long, and 18 feet wide in the clear, with a curve of 8 or 9 inches on the sides... In order to make the necessary excavation, two pumps were kept in constant operation for several months to keep down the water. A platform of large timbers closely jointed, and well bound together, 120 feet long and 40 wide, imbedded in the sand, forms the basis on which the superstructure is raised. The timber for the purpose was procured in the neighborhood; the free stone for facing was brought from Newark, in [New] Jersey, and cut on the spot; the backing or outside stone, from the head of tide water on Susquehanna, Potowmack, and James rivers; the lime from New England; and the Roman cement, in which the free stone is laid, from Old England. Considering the extraordinary difficulty encountered, and the expense necessarily incurred in procuring a foundation, and the distance the materials have been transported, the lock, when finished, will have cost a less sum than I should have supposed.

The same 1820 report mentioned that the stone lock at Deep Creek was "placed a little lower down Deep Creek" than the wooden lock. Could this mean that the foundation timbers of the original wooden lock were not removed in 1820 and are still there, underground?

Building the lock was not an easy job, as Luke Wheeler, the company's president, reported in 1819:

> To sink through a mass of spongy matter, connected with tide water, to a depth of seven feet or more, below the level of the low water-mark, and there, upon an area of 40 by 187 feet, to form a foundation sufficient to support a superstructure of hewn stone, 15 feet in height, 96 feet in length, and 18 feet in the clear in width, (the size of the lower chamber of the lock,) has been, to say the least of it, a work of no ordinary character in our country; rendered still more expensive by the distance whence the principal materials for it had to be brought."

The first known passage through the restored system was on April 28, 1823, by the REBECCA EDWARDS, a 35 ton schooner loaded with freight from North Carolina. A survey of the canal as it then existed shows that there were six stone locks: a two-lock staircase (two locks joined together) at Deep Creek, a single large lift lock at South Mills, two locks not far from each end (Wilkins and Spences locks); and two locks further toward the middle forming a summit level (North West and Culpepper locks). Altogether these raised the canal to its summit 19 feet above sea level.[24]

In 1826-29 the canal was redone again, widened to 40 feet and deepened to 6 1/2. The company's president and directors proudly reported that "It affords no ordinary satisfaction to have it in their power to announce, that the main canal connecting the waters of Virginia and North Carolina, has been completed, and a commerce between the two States, through this channel, has been commenced."[25] The Governor announced to the General Assembly that

> The Dismal Swamp Canal is a fine improvement, bringing benefits from afar, and contributing much to the value and improvement of Norfolk; a town which Virginia will cherish as being the first sea-port on the Atlantic coast... Commerce has built all the cities in the world; the want of it, has made the largest a habitation for bats and for reptiles.[26]

The Norfolk HERALD exclaimed that "the magnitude of the work cannot be conceived by those who have not actually seen it."[27] Wilkins and Spences locks were eliminated, and South Mills and North West locks were rebuilt to 100 by 22 feet, to be more compatible with those on the Chesapeake and Delaware Canal. The C&D, which was another essential navigation link along the Atlantic coast, had just been completed in 1829 to connect the Chesapeake Bay with the Delaware River.

Also during this enlargement a tumbling dam with a lock was proposed, (although perhaps never built until 1840, and then without a lock), across Deep Creek to maintain it at the high tide level, so boats could always get into Deep Creek locks. Deep Creek and Culpepper locks were apparently not enlarged at this time, but were still the old width of 96 by 18 feet.[28]

---

18. Swem 9C640-461 (Dec. 1805).

19. Emmerson, "Dismal Swamp Canal": Norfolk Herald, Jan. 20, 1836; Norfolk Beacon, Aug. 8, 1840.

20. William H. Stewart, History of Norfolk County, Virginia, Chicago, 1902, p.8.

21. "A chance for $50,000," by A.C. Brown, The Virginia Numismatist, July 4, 1976, pp. 9-12.

22. 1826 Report, BPW, p.66.

23. House Journal,1820, Appendix i; also 1820 BPW Report, pp.18-19.

24. "Plan of the Dismal Swamp Canal," drawn by J. Farley, U.S.A., July 1826. Ms map, National Archives, Senate Collection, No. 25222.

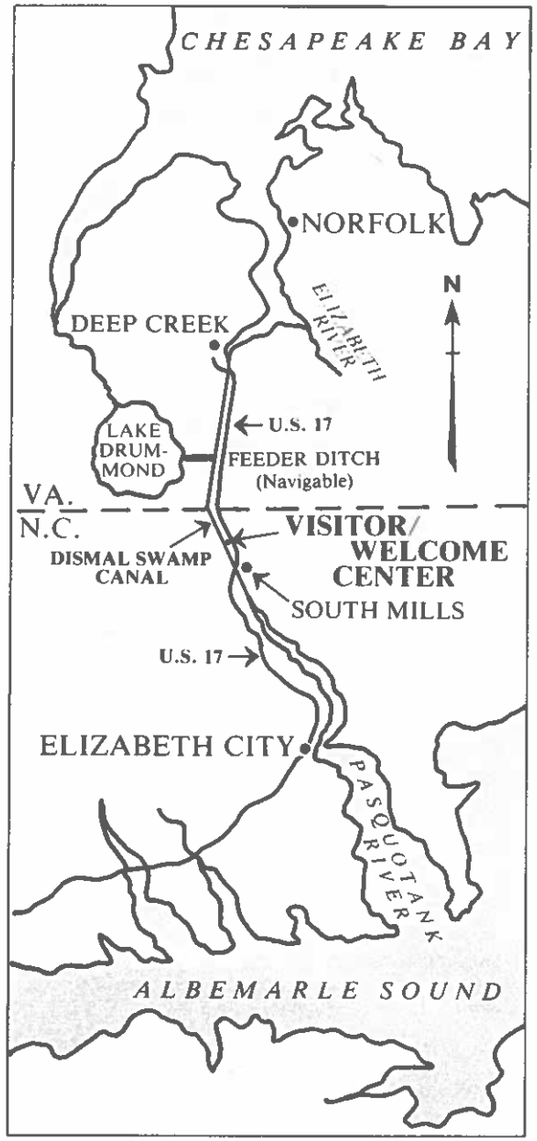
25. 1829 Report, BPW, p.29.

26. 1830 Report, BPW, p.227. Governor's message to the General Assembly on December 6, 1830.

27. Emmerson, "Dismal Swamp Canal": Norfolk Herald, Nov. 11, 1829.

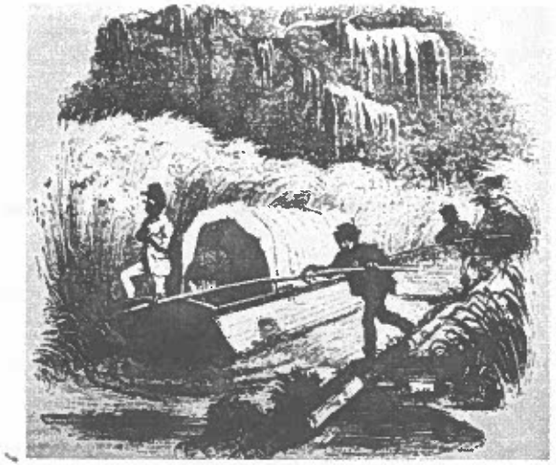
28. BPW Reports, DSC Co., 1826 and 1828. (The 1896 map has Culpepper Lock 17.9' wide.)

North Carolina
The Beauty Only Begins With The Scenery.



Flyer courtesy of the Dismal Swamp Canal Welcome Center

Printing of this brochure was made possible by a Grant from
The Elizabeth City Foundation



For more information, contact

Dismal Swamp Canal Visitor /Welcome Center

2356 Highway 17 North
South Mills, N.C. 27976
(919) 771-8333 Open 9-5
FAX (919) 771-2055 Tues-Sat

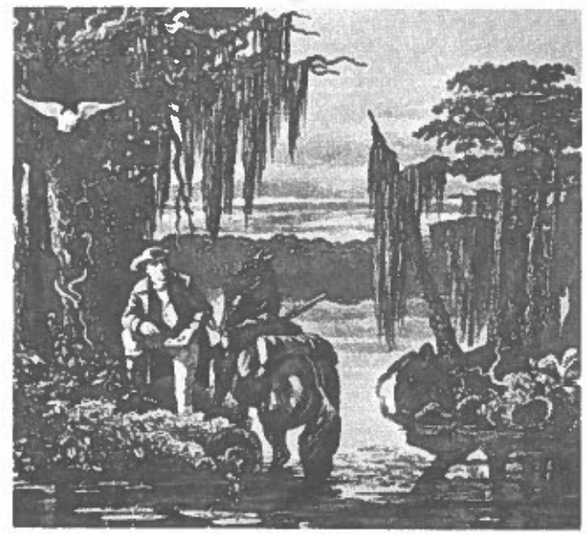
The Center is approximately 3 miles south of the North Carolina-Virginia state line on Highway 17, on the Dismal Swamp Canal. For the boaters, we are approximately 5 miles from the South Mills Locks, traveling north. Travelers are welcome by either land or water.

The Center has a 150-foot dock on the Canal in back of the reception area. The Visitor's Area adjoining the rest facility has ample grounds to accommodate tourists who wish to picnic. The rest area is open 24 hours a day, as is the boat dock. The Canal has two sets of locks, one at Deep Creek, Virginia, and one at South Mills, North Carolina.

Maps, brochures, and booklets, containing information on accommodations, dining, and attractions for both boating and auto traffic are available.

precision printing

The Dismal Swamp Canal



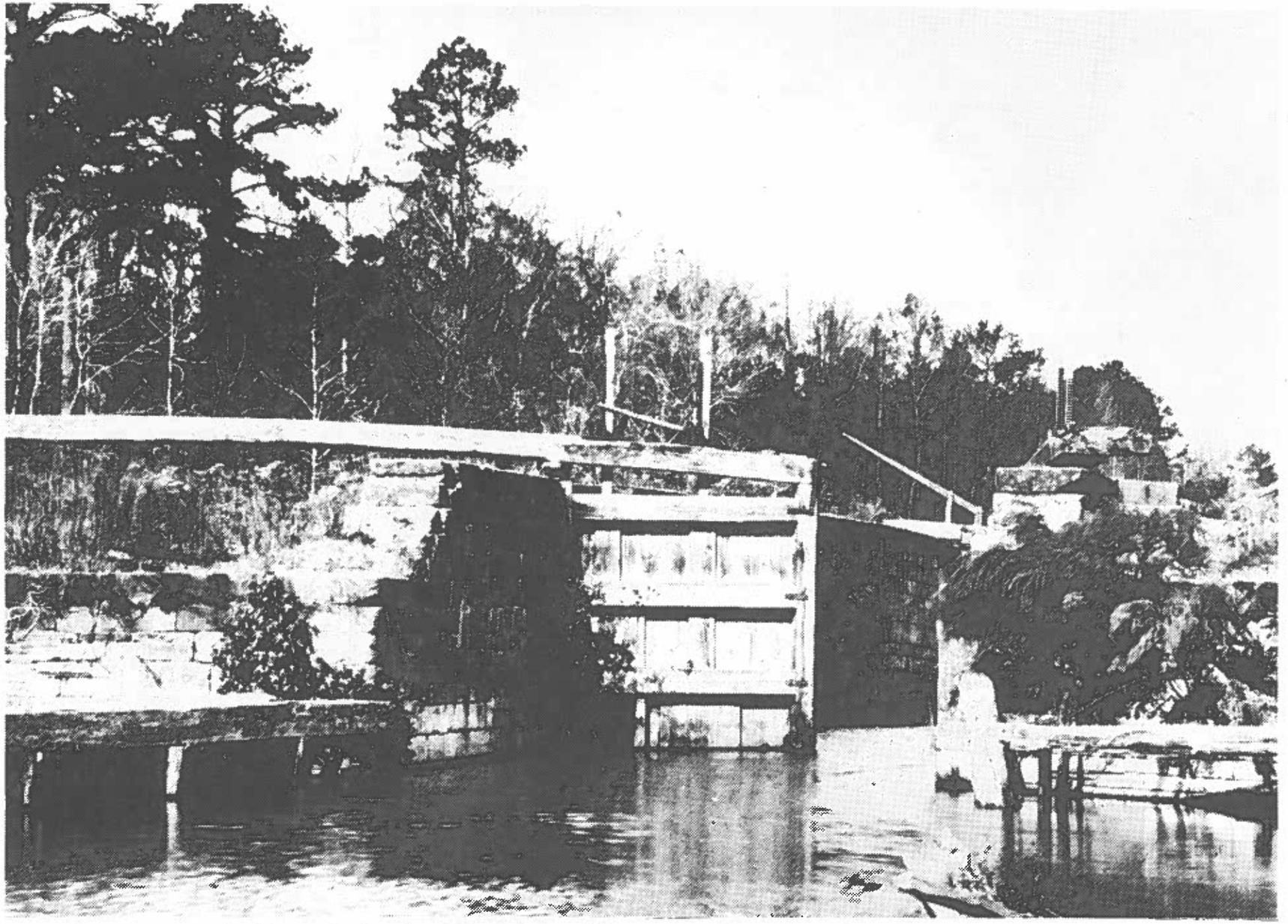
Designated as a

NATIONAL HISTORIC
CIVIL ENGINEERING LANDMARK

AMERICAN SOCIETY OF CIVIL ENGINEERS FOUNDED 1852

Entered in the

NATIONAL REGISTER
OF HISTORIC PLACES



Culpepper Lock was a mile down the canal from the Dismal Swamp Canal Welcome Center, at the end of Culpepper Road. This was one of the canal's beautiful cut-stone locks, built in the 1820's and removed in the 1890's during the Great Enlargement. A few stones can still be seen on the east bank of the canal at the waterline. This photograph, #PR 407 courtesy of the Mariners Museum, is from a glass-plate negative taken by John G. Wallace II about 1870. The view is up the lock (north), from the towpath. That it is indeed Culpepper Lock has been confirmed by local historian Mrs. Mary E. Whitehurst, who has another photograph of the scene. Luther B. Culpepper, Jr. of Elizabeth City told us that his ancestor, Peter Culpepper, built the lock in the 1820's and used it to ship his farm products and lumber; his son Mason Culpepper was in the North Carolina State Legislature from 1820 to 1825. Peter Culpepper is buried across the road from the Welcome Center. A rubbing of his tombstone and a stone from his lock would make a great Culpepper Lock exhibit!

Later improvements included the rebuilding of the guard gate at Lake Drummond on the Feeder Canal, into a lift lock. Originally "there was no lock, but a single gate, which when opened for the passage of lighters, of course allowed the water to run out freely the whole time the lighter was going in or out; which could not, one time with another, be less than ten minutes. The column of water thus running to waste... was eleven feet wide... and had a head of at least two feet, probably more."[29] Lighters passed through the lock and back from four to six times a day, so the new lift lock, completed by 1830,[30] saved a great deal of the swamp's water supply.

In 1836 South Mills Lock had to be rebuilt.[31] This lock had an unusually high lift of 14 feet and was almost ready to collapse in 1835, so it was rebuilt into a two-lock staircase (with two lifts), each lock with a 22 by 100 foot chamber.

The most famous of the craft plying the canal then was the sternwheeler LADY OF THE LAKE, built in 1830 especially to tow boats through the canal. A contemporary lithograph by Thomas Williamson, a local artist,[32] shows her steaming past the Lake Drummond Hotel (which was in fact not on Lake Drummond, but beside the canal, straddling the state line). Williamson's drawing is the most famous representation of the canal. Engravings made from it were used on paper currency of the time, such as $10 bills from Norfolk's Exchange Bank, and Erie Canal enlargement bonds.[33]

A steamer famous for another reason was the WATER WITCH, a tanker built to lock into the canal and load up with juniper water for the naval vessels in Hampton Roads. The idea was a good one, because the brown swamp water, full of tannins, stayed fresh on long voyages. Unfortunately, the WATER WITCH turned out to be just too large for the Dismal Swamp Canal locks, so the whole project had to be abandoned!

The Gilmerton Cut

The next stage in the development of the canal was to bypass the frustrating creek navigations at either end, by constructing extensions of the canal. The first to be completed was the Gilmerton Cut, extending 2 1/4 miles north from Deep Creek Locks to the Elizabeth River, bypassing Deep Creek entirely. Because the Gilmerton Cut was abandoned in the 1890's and is still preserved just as it was when completed in 1843, it is treated in a separate section.

Turner's Cut

At the south end of the canal, Turner's Cut, named after the contractor D.J. Turner, was a 3 1/2 mile extension completed in 1860 "to avoid that odious part of our navigation, called the Moccasin track," a tortuous section of the navigation along Joyce's Creek at the upper end of the Pasquotank.

> The Pasquotank river is the southern outlet of the canal, and for the distance of ten or twelve miles is crooked beyond all description, and so narrow and full of snags and shoals as to be one of the most vexatious causes of complaint from all who navigate this river and enter the canal.[34]

While digging the cut, the workmen found a sulphur spring 400 yards from the mouth of Joyce's Creek and 8 1/2 feet below the surface of the swamp, as soon as sand was reached.[35]

Originally, a guard lock was planned at the head of the cut, to protect it from floods in Joyce's Creek. The idea was to leave the gates open until the creek flooded, and then to close the gates to let boats lock through while keeping floodwaters out. Although the stone for the lock was contracted for, it was probably never built.[36] Turner's Cut still has no lock today, and it is still active as part of the main line of the Dismal Swamp Canal.

Enter the Canal's Arch-Rival: the Albemarle and Chesapeake Canal

Until 1859, the Dismal Swamp Canal was the only inland water route between Chesapeake Bay and Albemarle Sound; now there are two. When it was completed, the Albemarle and Chesapeake Canal was one of the first of the world's modern sea-level ship canals, and its lock at Great Bridge was one of the largest in the world, the second largest in the Western hemisphere, designed for large boats and tows. The Dismal Swamp Canal, then with its four little locks, was at a complete disadvantage. From then on, the Dismal Swamp Canal led a precarious hand-to-mouth existence. Even today, there are periodic efforts to close down the locks and abandon the canal as a navigable waterway.

The canal during the Civil War

The value of the Dismal Swamp Canal during the Civil War can be measured by the trouble taken by both sides to block or possess it. While the Confederates held the region it was a much-used supply route, fulfilling its intended role as an inland passage safe from warships on the Atlantic. But the Union forces invaded Albemarle Sound in 1862, destroying all but two of the Confederates' "Mosquito Fleet" on the Pasquotank. The CSS BEAUFORT managed to escape up the canal to Norfolk, but when the CSS APPOMATTOX arrived at South Mills Lock, it was just <u>two inches</u> too wide to get in, and was burned by her frustrated captain to prevent her capture by the Union.

Later on, Union forces made an advance toward South Mills Lock with the intention of blowing it up, to prevent Confederate ironclads from re-invading Albemarle Sound. They met the Confederates three miles south of the lock. Each side claimed a victory at the resulting Battle of South Mills (the Confederate name) or The Battle of Camden (the Union name), but they never reached the lock to wreak any destruction. The damage to the canal actually came not from cannonballs and fire, but from neglect during the war and the reconstruction period afterward. One can only imagine the effect of wartime and Union occupation on the daily operation and maintenance of the canal. Everyone has to admire the pluck of Leroy G. Edwards, the canal's Collector of Tolls, who was tired of Union craft passing through without paying anything, so he once stopped a Union steamer to do his duty. The steamer Captain's exact words were probably not recorded.[37]

Another casualty of the war were pleasure craft in the swamp. Union general Peck cut them up to make pontoons to cross the Blackwater River.[38]

Of the postwar canal tales in Alexander Brown's book, the most unforgettable is that of Uncle Aleck, related in the memoirs of Charles A. Stewart:[39]

> For many years the little steamers navigating the canal plying between Norfolk and Elizabeth City carried the mail between these two points. The intermediate post offices, Deep Creek, Lake Drummond (later Wallaceton), Lilly (Cross Canal), and South Mills, were served on

---

29. Emmerson, "Dismal Swamp Canal": Norfolk <u>Beacon</u>, Feb. 9, 1831.

30. BPW Report, DSC Co., 1830.

31. BPW Report, DSC Co., 1835.

32. Emmerson, "Dismal Swamp Canal": Norfolk <u>Herald</u>, April 30 and Nov. 22, 1830.

33. See Dr. John A. Muscalus, "The Dismal Swamp Canal and Lake Drummond Hotel on Paper Money, 1838-1865," Historical Paper Money Research Institute, Box 185, Bridgeport Pa., 1965, cited in <u>The Virginia Numismatist</u>, June 1967, pp.8-9.

34. 34th BPW Report, 1851, p.284. See also <u>Historical and Descriptive Sketches of Norfolk and Vicinity</u>, by W.S. Forrest, Philadelphia, 1853, pp.98-99.

35. 41st BPW Report, 1858, p.119.

36. 41st BPW Report, DSC Co., p.106 (1858).

37. 45th Congress, 2nd Session, Exec. Doc. No.19, January 21, 1878, "Letter from the Secretary of the Treasury in reference to the interests of the Government in the Dismal Swamp Canal," in Brown, DSC, p.102. For more on the Battle of South Mills see e.g. <u>Battles and Leaders of the Civil War</u>, Century Magazine, 1880's, V.1, pp.654-658.

38. <u>The Dismal Swamp and Lake Drummond</u> by Robert Arnold (Norfolk, 1888), p.32.

39. "Extracts of Maritime Interest from <u>My Story</u>" by Charles A. Stewart, Mariners Museum, 1947, p.5; quoted by Brown in DSC, p.123, and in <u>The American Neptune</u>, July, 1947, pp.242.

this route. A small black negro was the mail carrier on the steamer THOMAS JEFFERSON, Uncle Aleck, the "mail man" as he was familiarly known up and down the canal length. The steamer moved very slowly between stopping points making barely five miles an hour and Aleck had ample time for long naps between stops. One day, while sitting near the low rail dozing, he lost his balance and plunged headlong overboard.

"I knowed I was overboard soon's I struck de water" exclaimed Uncle Aleck as he was pulled aboard, and that remark became a by-word or slogan of the boys for many years afterwards.

The enlargement of the canal, 1896-1899

Although some of the lock chambers were lengthened after a reorganization of the company in 1880, the canal changed little until it was bought by the Lake Drummond Canal and Water Company in 1892. One of the company's first projects was to dig the Portsmouth Ditch, 10 miles long from Lake Drummond to Portsmouth. This was not for navigation, but to carry drinking water to that region. Unfortunately, the company did not realize that the original Dismal Swamp Canal act prohibited the use of the swamp water for anything but navigation. The Portsmouth Ditch is still there, but all that work was done for nothing.

Next, the company undertook a complete rebuilding of the Dismal Swamp Canal, giving it essentially the form it has today. The goal was to make it competitive with its rival the Albemarle and Chesapeake, which had drawn off most of the intracoastal traffic since its completion in 1859. The canal was widened and deepened and the whole summit level lowered to eliminate the North West and Culpepper locks, leaving only two locks, at Deep Creek and South Mills. These were entirely rebuilt of timber, with single lifts, and chambers 250 feet by 40 feet and with 9 foot draft - deliberately a bit larger than Great Bridge Lock on the A&C. To save water, especially during the droughts to which the canal was so sensitive, each lock had a pair of intermediate gates so only part of the chamber had to be filled or emptied to pass through the smaller craft - a feature which the present locks unfortunately do not have.

It was during this rebuilding that the Gilmerton Cut was abandoned. Deep Creek was dredged and widened and once again became the main route, instead of the Gilmerton Cut; the old Tumbling Dam was removed. The whole process was carried out with the latest canal building technology, of enough scientific interest to have been written up in SCIENTIFIC AMERICAN.[40] Steam dipper dredges scooped out the roots, hydraulic dredges sucked up the underlying loose soil, and steam pile drivers worked at the locks.

(Continued on page 86)

40. See "Reconstruction of the Dismal Swamp Canal," Scientific American, V.78, No.10, March 5, 1898, pp. 145, 153, 154; and "The Dismal Swamp of Virginia" in the April 21, 1900 issue, pp.249-250, cited by Brown, DSC, p. 150.

22

MEMORANDUM.

Officers' and servants' salaries, viz:

	Paid.	*Annual Salary.*
Wiley M'Pherson, as superintendent southern section,		150 00
Wiley M'Pherson, keeper of Culpeper lock,		150 00
Paid to 30th June, 1832,	175 00	
Lem. Campbell, keeper of southern lock,		240 00
Paid to 30th June, 1832,	140 00	
James Carr, superintendent northern section,		200 00
John Hodges, keeper of lock at feeder,	180 00	180 00
Jim Bacon, keeper of north-west lock,	83 20	163 20
James Tarbell, keeper of lock at north end,	300 00	300 00
James Tarbell, for additional hand,	151 20	151 20
Negro man at Float bridge,	86 20	86 20
James Carr, as manager of north-west canal,		100 00
Cary M'Pherson, keeper of a lock north-west canal,	180 00	180 00
A. Poiner do. do.	120 00	120 00
D. M. Curtis, as toll-gatherer,	600 00	600 00
Servant at toll-office,	108 00	108 00
A. Feret, as treasurer,		150 00
	$2,123 60	$2,878 60

Office of the Dismal Swamp Canal Company,
NORFOLK, Nov. 30th, 1832.

A. FERET, *Treasurer.*

List of INWARD ARTICLES *paying toll on the Dismal Swamp Canal, year ending 30th November*, 1832.

11794 bales of cotton, 2030 hogsheads tobacco, 2381 kegs and boxes manufactured tobacco, 6449 barrels flour, 12976 barrels fish, 11789 barrels tar and turpentine, 107393 bushels

23

corn and meal, 24095 bushels wheat, 3329 bushels flax seed, 1282 bushels beans and peas, 11406 bushels potatoes, 215300 pounds bacon, 49 hogsheads molasses—Producing in tolls, $7,502 42.

OUTWARD ARTICLES.

113 barrels wine, 4949 barrels spirits, 1333 barrels pork, 3410 barrels flour, 1741 barrels fish, 474 barrels sugar, 252 hogsheads sugar, 467 hogsheads molasses, 871 bags coffee, 144 boxes shoes and hats, 105 9-20 tons iron, 781 casks nails, 104 crates of ware, 1067 casks lime, 3304 bushels potatoes, 45381 bushels salt—Producing in tolls, $3,618 10.

LUMBER.

132938 cubic feet masts, &c., 290908 cubic feet other timber, 85980 cubic feet plank, 1123334 pipe staves, 4285135 hogshead staves, 67302 barrel staves, 5373732 long shingles, 2290610 two feet shingles, 17497591 small shingles, 63495 garden poles, 32386 fence rails, 17122 coopers' bolts, 19369 coopers' staves, 11386 posts, 1399 cords wood—Producing in tolls, $17,269 41.

Articles paying toll on North-West Canal.

73725 cubic feet mast timber, 148190 cubic feet other timber, 159583 cubic feet plank and scantling, 482837 hogshead staves, 26627 barrel staves, 118254 long shingles, 8450 two feet shingles, 710285 building shingles, 402¾ cords wood, 2367 bushels corn—Producing in tolls, $1,075 98.

RECAPITULATION.

Amount of north-west canal,	1,075 98
inward cargoes,	7,502 42
outward cargoes,	3,618 10
lumber,	17,269 41
rent,	190 00
road,	1,010 92
	$30,666 83

This list of lock keepers, cargoes and tolls on the Dismal Swamp and North West canals is from the 1832 annual report of the Dismal Swamp Canal Company to the Virginia Board of Public Works (VC&NS Archives)

THE STONE FEEDER DITCH LOCK IN THE 1870'S

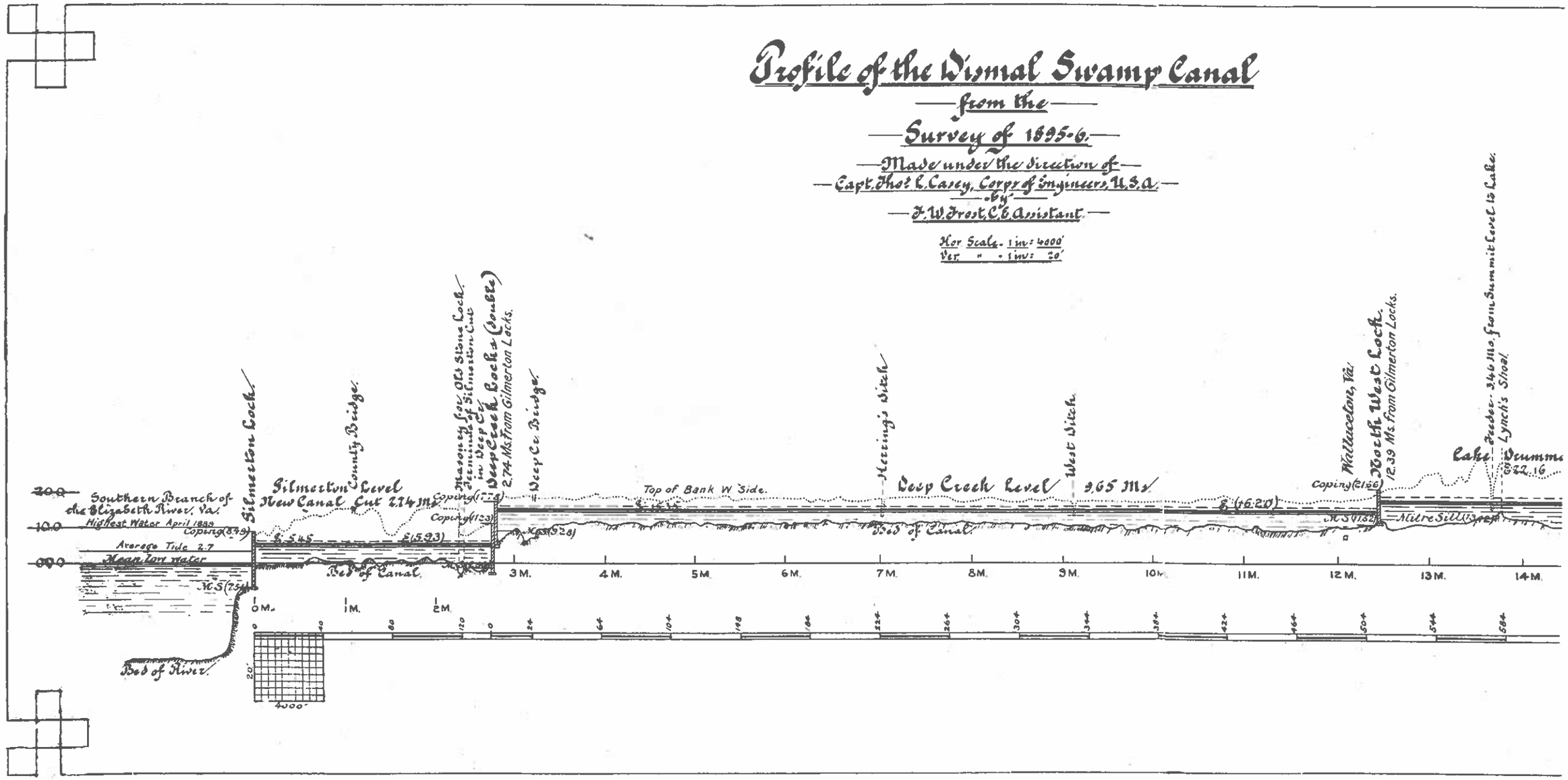
THE WOODEN FEEDER DITCH LOCK IN THE 1910'S

We are fortunate to have these views of two of the incarnations of the Feeder Ditch Lock, located half a mile down the ditch from Lake Drummond.

LEFT: The stone lock, from a glass-plate negative by John G. Wallace II in the 1870's, courtesy of the Mariners Museum. It is evidently the same scene as the 1873 woodcut of the Lone House on page 60, looking west through the tree canopy toward the lake. Did the Lone House really change that much, or did the artist do it himself? The photograph suggests that the ends of the lock (with the gates) were of stone, with a wood-sided chamber in between. Only a few other examples of this type are known in Virginia.

ABOVE: The stone lock was replaced by this wooden one during the Great Enlargement of the 1890's. This photograph was taken about 1907 by H.C. Mann and has been reproduced from a Jamestown Exposition post card, courtesy of Fred R. Bell. The view is looking east, down the canal toward the Dismal Swamp Canal. The lock was replaced by a permanent spillway in 1935.

PROFILE OF THE DISMAL SWAMP CANAL IN 1896.



This survey report on the Dismal Swamp Canal,
made under the direction of Capt. Thomas L. Casey, Corps of Engineers,
by F.W. Frost, C.E., and drawn by F.B. Satchwell in 1896,
shows the canal as it was before it was enlarged in 1896–1899.

The Gilmerton Cut was abandoned,
the cut-stone North West and Culpepper Locks were removed,
and the stone Deep Creek, South Mills and Feeder Ditch locks
were replaced by larger wooden ones.

(Map courtesy of Karl Kuhlmann of the Norfolk District, Corps of Engineers)

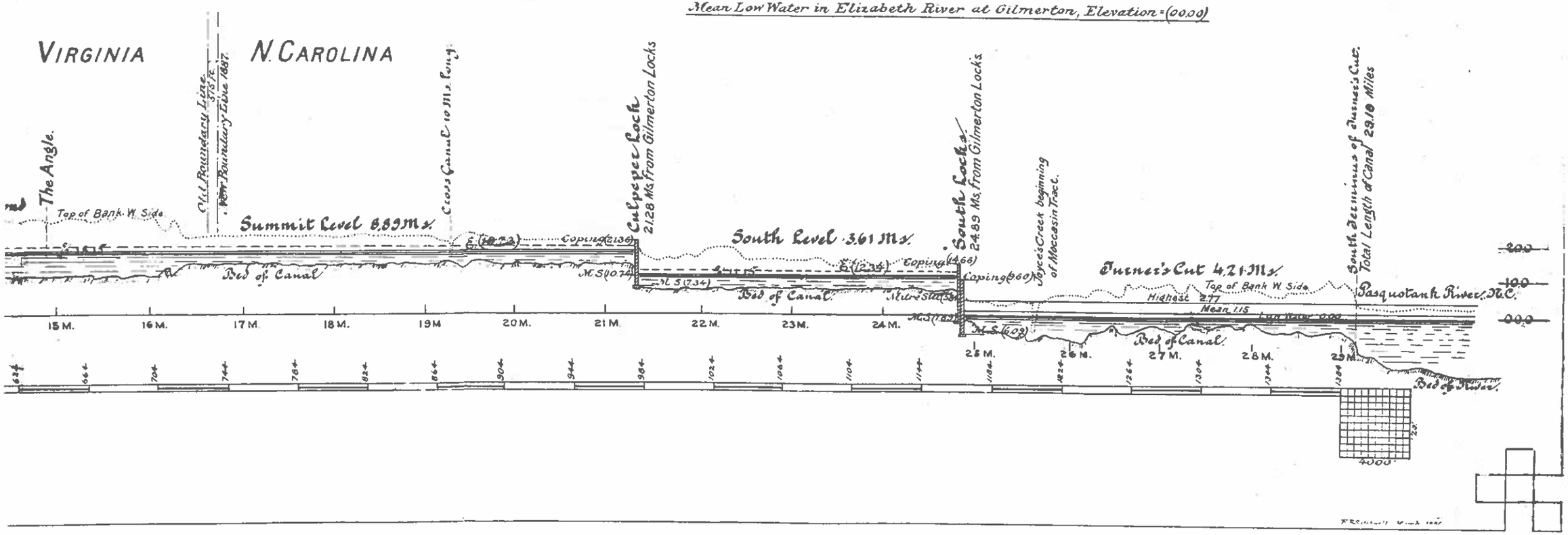
~ Levels and their Lengths ~ Locks and their Lifts ~

Name of Levels	Lengths	Locks	Lift Ft	Fall Ft
New Canal Cut	2.74	Gilmerton	5.93	
Deep Creek	9.65	Deep Creek	10.27	
Summit	8.89	North West	3.53	
South	3.61	Culpeper		7.39
Turner's Cut	4.21	South		11.23
			19.73	18.62

Total length of Canal 29.10 Miles
Dotted lines show Elevations by Survey of 1678-9.

~ Datum or Reference Plane ~

Mean Low Water in Elizabeth River at Gilmerton, Elevation = (00.00)



THE CANAL'S STONE LOCKS IN 1896, JUST BEFORE THE GREAT ENLARGEMENT

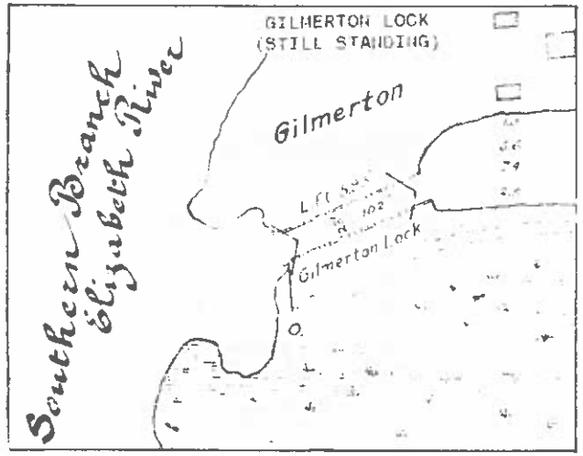
Dismal Swamp Canal

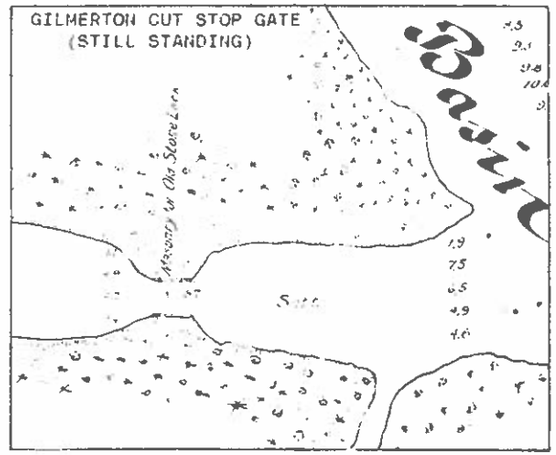
— Surveyed under the direction of —
— Capt. Thos. L. Casey, Corps of Engineers, U.S.A. —
— by —
— J. W. Frost, Asst. Engineer. —
— Nov.-Dec. 1895- Jan. 1896 —

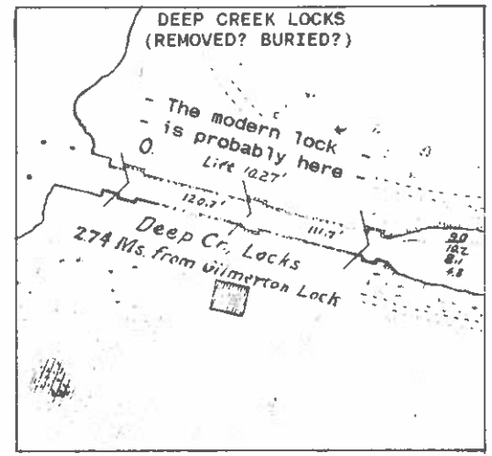
— Scale - 1in = 100ft —

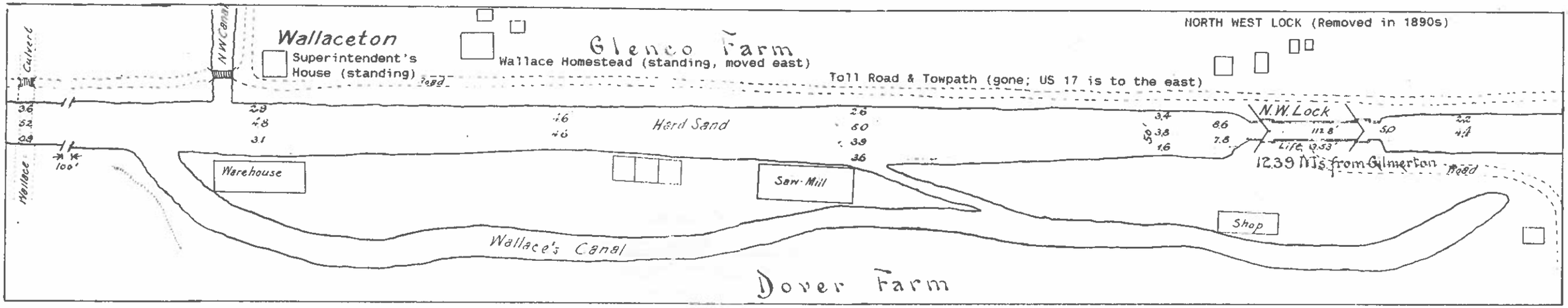
Reduced Scale ⟵ 100 Feet

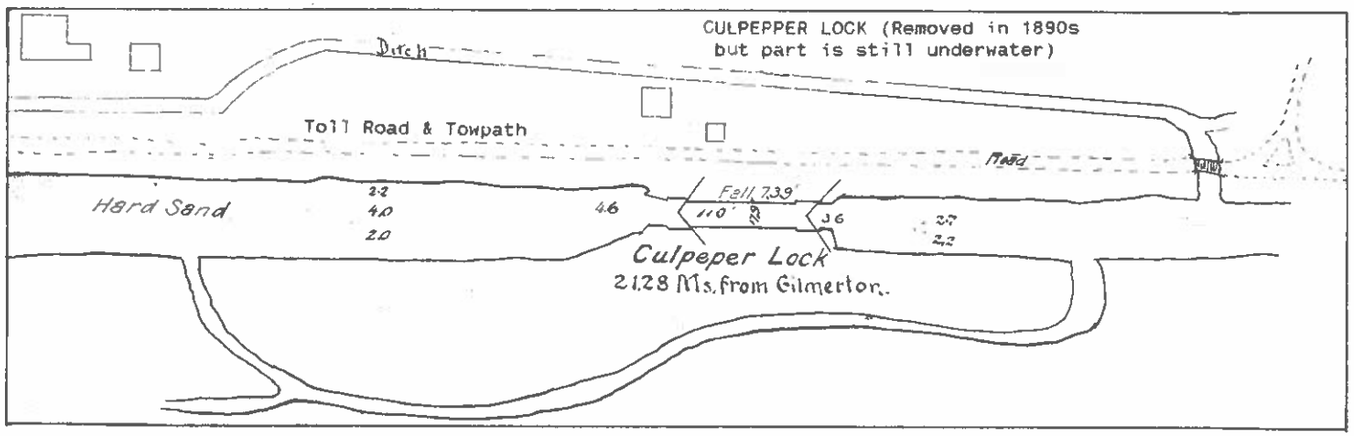
From maps courtesy of Norfolk District, Corps of Engineers

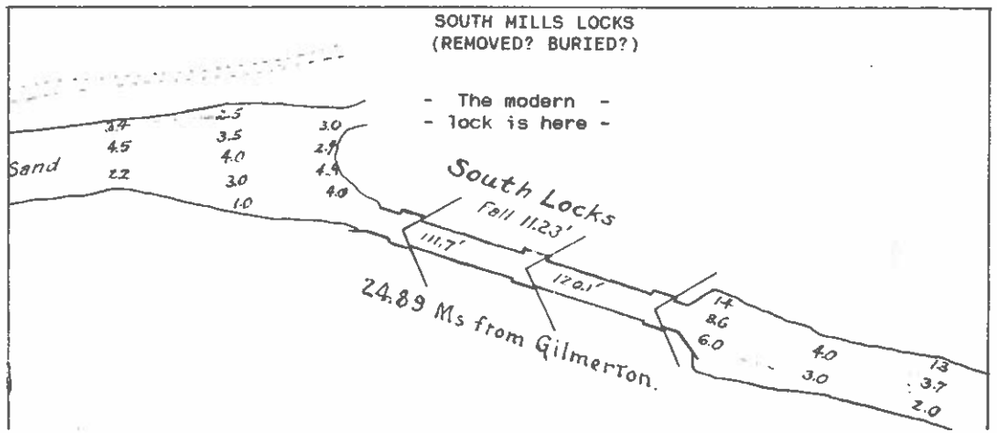


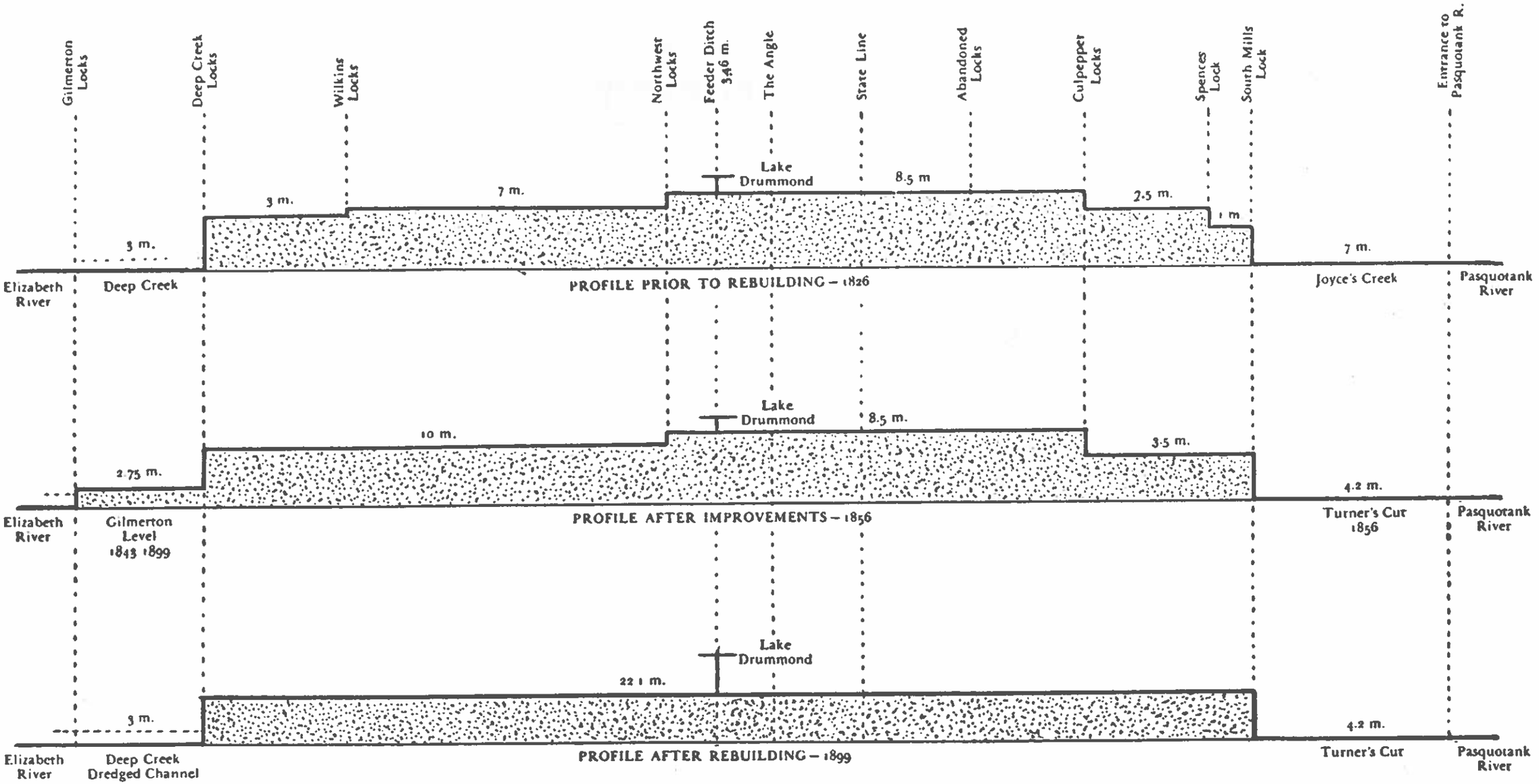


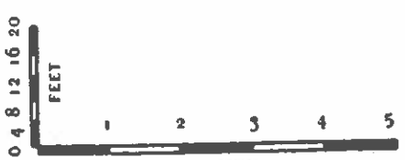












North
← To Norfolk

SURFACE LEVEL PROFILES OF THE DISMAL SWAMP CANAL DURING ITS THREE MOST IMPORTANT STAGES, 1826, 1856 and 1899 - Drawn by A.C. Brown, 1945

Reproduced with permission from THE DISMAL SWAMP CANAL by Alexander C. Brown
Norfolk County Historical Society of Chesapeake, 1970, page 152.

South
To Elizabeth City →

86

Byrd Urges Preserving Of Swamp

WASHINGTON (AP)—ecm. Hmrry F. Byrd Jr., IndVa., today urged that a thorough study be made of ways of preserving the Great Dismal Swamp, located im virclnla amd North Carolina.

Byrd's testimony was pfe?ared for a subcommittee of the Senate Interior Committee In behalf of a bill cosponsored by the four senators from the two states.

"Today we have come to realize that there are but a few unspoiled areas remainimo In o"r co"ntry," Byrd said. "I hope that this legislation will lead to a reasonable approach to conservation of the Dismal Swamp's values."

Byrd said the swamf Is faced with two serious threats—the possibility of destruction of lJr'c areas by fire, because of excess water drainage, and the potential encroachment of civilization from surrounding areas.

"We must have a detehlej study of the area in order to be able to reach a course of actiom for preserving all or a portion of this region," Byrd said.

From the

RICHMOND NEWS LEADER

R.I.P.

ABOVE: April 9, 1972

FAR RIGHT: June 7, 1988

COMMONWEALTH OF VIRGINIA

GENERAL ASSEMBLY

HOUSE JOINT RESOLUTION NO. 110

Memorializing the Congress of the United States to act favorably on Senate Bill 2441, which authorizes the Secretary of the Interior to conduct a study to determine the best and most feasible means of protecting and preserving the Great Dismal Swamp and the Dismal Swamp Canal.

WHEREAS, the Great Dismal Swamp and Dismal Swamp Canal are located within Virginia and North Carolina; and

WHEREAS, the Great Dismal Swamp has great ecological, scenic, recreational and historic values for the Commonwealth; and

WHEREAS, the Dismal Swamp Canal can be developed for recreational boating purposes; and

WHEREAS, Senate Bill 2441 authorizes a study by the Secretary of the Interior to determine the best and most feasible means of protecting, preserving and developing the Great Dismal Swamp and the Dismal Swamp Canal as valuable natural resources of the Commonwealth; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Congress of the United States is hereby memorialized to act favorably on Senate Bill 2441 of the first Session of the Ninety-second Congress without delay.

RESOLVED FURTHER, That the Clerk of the House of Delegates is instructed to send copies of this resolution to the members of the Congress of the United States.

Agreed to by the House of Delegates, March 2, 1972.

George R. Rich
Clerk.

Agreed to by the Senate, March 10, 1972.

Louis H. Lucas
Clerk.

From "Hearing before the Subcommittee on Parks and Recreation, U.S. Senate" on May 9, 1972, with statements by Senators William B. Spong, Jr., and Harry F. Byrd, Jr.; W.E. Ashley, Jr. for the Izaak Walton League; Alvah Duke and Art Wright for the Wilderness Society; Dr. Carl Holcomb for the Virginia Conservation Council; Stephen Kelly for the Nature Conservancy, and others. (U.S. Government Printing Office)

Swamp Canal gains place in history

By The Associated Press

CHESAPEAKE — The Great Dismal Swamp Canal, hand hewn by slaves from the wilderness nearly two centuries ago, has been placed on the National Register of Historic Places.

The designation yesterday culminated a two-year effort by Virginia and North Carolina officials.

"I hope people who may have been indifferent to the canal will now view it in a different light," said Rep. Walter B. Jones, D-N.C., who has struggled for years to prevent closure of the 55-mile cut linking Deep Creek in Chesapeake with North Carolina's Pasquotank River.

As early as 1728 William Byrd proposed a canal to link Virginia and the Albemarle region of North Carolina. George Washington also mentioned the possibility in the 1760s.

An act for "cutting a navigable canal through the swamp" was passed by the Virginia General Assembly in 1787, with North Carolina following suit three years later. The canal was constructed from 1793 to 1805 and led directly to the rise of Elizabeth City, N.C., as a transportation center.

The waterway has been used by pleasure boats for decades, but drought and expensive repairs to the locks forced closure of the canal in the peak traveling periods in recent years.

The historic designation should help attract tourists to the region, said Philip McMullan, executive director of Northeastern North Carolina Tomorrow, a non-profit development group.

Officials from the two states hope to stage a giant dedication ceremony and flotilla next summer, McMullan said.

The 1890's enlargement of the canal also applied to the Feeder: the stone lock at Lake Drummond was replaced by a larger wooden one. In addition, the enlargement had obliterated the towpath along the Dismal Swamp Canal, so the company built an entirely new road, which became the George Washington Highway, now U.S. 17, in 1925. This road, some distance from the edge of the water, was never used for towing; so from the 1890's onwards, all craft using the canal had to be self-propelled, or were towed by steamers.

The Corps of Engineers takes over - 1925

For a few years the new enlarged canal succeeded in diverting most of the trade from its rival the A&C, but this understandably came to an end in 1911 when the U.S. Government purchased the A&C as part of the Intracoastal Waterway, and removed the tolls. The Dismal Swamp Canal went into decline but it was rescued in 1925 when the Government, to be fair, bought it as well, bringing both rivals under the wing of the Corps of Engineers.

The Corps began its own rebuilding of the canal, replacing the Feeder Lock with a non-navigable sluice gate, or spillway, in 1935. A narrow-gauge marine railway, still in use, was installed to portage small craft around the Feeder spillway, into Lake Drummond. In 1939-1941 the Corps entirely rebuilt Deep Creek and South Mills locks, this time of steel and concrete, with 300 by 52 foot chambers and an operating depth of 12 feet. These are the locks still in use today.

The new 1941 locks were built beside the old 1890's ones, to the east, and when the new ones were finished the 1890's ones were abandoned and covered up, and should still be intact underground. The same technique may have been used when the 1890's locks were built. Photographs at Deep Creek show the stone locks beside the 1890's one, just to the east.[41] A wall of this stone lock may have been dug up again when the 1941 locks were built.[42] Are the lock stones now scattered beside Deep Creek from this wall? And what about South Mills? Maps suggest that at South Mills, the stone locks, and the 1890's lock, were in the same spot, so the stone locks may have been entirely removed. If so, where are the stones? But it would be exciting to find that it is still intact, ready to be resurrected to provide a lock more of a size needed by the small craft which now use the canal, thereby saving water while being more picturesque. And who

---

41. See Brown, DSC, pp. 136, 146.

42. "Section of Old Canal Lock Uncovered at Deep Creek, Richmond Times-Dispatch, Jan. 23, 1940 (Richmond Public Library file). The lock wall is described as about 75 feet long, 50 feet east of the 1890's lock, and "built of sandstone blocks held together by a mortar made of burned lime," the blocks "believed to have been ballast brought to Norfolk in ships that put in here from Europe, although there was a difference of opinion concerning their origin." (In fact, if the blocks were from the old lock, they probably came from Newark, New Jersey!)

knows what remains underground of the canal's earliest locks, built of juniper timber from the swamp!

The Great Dismal Swamp National Wildlife Refuge

Today the Dismal Swamp Canal still offers the same sheltered and scenic route through the historic Dismal Swamp region which it originally did almost two centuries ago, despite many changes through the years. One of the more recent changes has been the official appreciation of the Great Dismal Swamp as an invaluable wetland and nature preserve. The official position these days (long promoted by the American Canal Society) is that the health of the swamp comes first; navigation in the canal comes second.

For years, the water supply for the locks, and now the water level in the swamp itself, has been a problem during droughts. The worst of the droughts were in 1909-1910, 1942, and in 1952-1953 when the canal practically dried up.[43] Whenever the water level in the swamp is endangered the locks are used sparingly or are shut down. Over the years, experiments have been tried to keep the canal working during droughts: in the 1960's surplus dry dock pumps were used to pump water out of the Pasquotank River, back into the canal at South Mills; and temporary marine railways, similar to the one still at the Feeder Ditch spillway, were installed by 1954 to portage small craft around Deep Creek and South Mills locks. When these marine railways were dismantled in 1970, parts were used at the Lake Drummond spillway.

So far, the Dismal Swamp Canal has survived the droughts and cost/benefit ratios which almost brought it to permanent closure.[44] Now it has a new added function: that of gateway to the Great Dismal Swamp Wildlife Refuge, thanks to the Union Camp Corporation and the Nature Conservancy.[45]

---

43. "The Dismal Swamp Canal," mss by Mary Evelyn Whitehurst, May 7, 1977.

44. See for example "Swamps & Split Levels" about Frederic Heutte, TIME, Nov. 30, 1962, p.21; and "Oldest Canal in Use in Peril" by Carl Cahill in THE WATERWAYS JOURNAL, May 20, 1985, p.6+.

45. See for example the company's magazine, Contact, V..8 #1, 1973, whole issue, on the Dismal Swamp (Mariners Museum library); Don Hill's article in The Commonwealth, April 1973; and many other articles at the time lauding Camp's action.

Also see Dismal Swamp Canal, Dismal Swamp Study P.L.92-478, 63 pp., February 1974, and 4-page 2 April 1974 addendum (Norfolk District, Corps of Engineers). An interesting discussion of future parks, alternative actions to water supply problems, and other plans in 1974.

The Future of the Dismal Swamp Canal

In the 1980's the Corps of Engineers' Norfolk District saw to it that the canal was designated the Dismal Swamp Canal Historic District, and the American Society of Civil Engineers designated it a National Historic Civil Engineering Landmark. The plaques are on display beside the new Dismal Swamp Canal Welcome Center established by North Carolina. The imminent rebuilding of US 17, the George Washington Highway, in Virginia has the potential of changing the road from a high-speed death trap to one which visitors can use to safely visit picnic areas and trails along the Dismal Swamp Canal.

So is the swamp still "dismal"? In the 1720's William Byrd, who probably gave it its name ("dismal" was then a common term for "swamp"), considered it a "horrible desart," a "vast body of dirt and nastiness" in which "Not so much as a Zealand frog cou'd endure so anguish a situation." But others have had a different opinion:[46]

> Although the Dismal Swamp is so uninviting, it is one of the healthiest places in the United States. Death from disease has never been known in that place, and it is impossible to tell what age one would attain if they would take up their abode in it. I have been told that instances were known where persons were found who were so old that they had moss growing on their backs, and who could give no idea of their age.

###

HOW A GENTLEMAN DRAINED THE DISMAL SWAMP CANAL

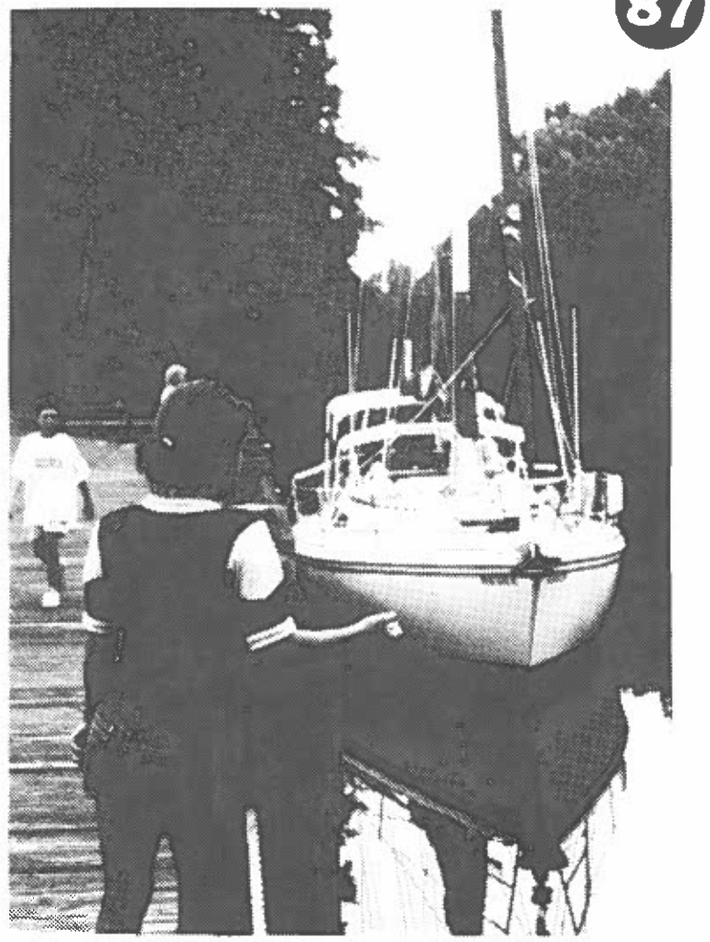
From NILES' WEEKLY REGISTER, September 21, 1844:

The water (we learn) in the Dismal Swamp Canal is gradually but constantly decreasing. The reason, we are told, is this: Some time since a gentleman whose land borders upon Lake Drummond obtained leave of the "canal company" to drain his land into the lake; he accordingly dug a ditch some ten or twelve feet wide leading through his land into it, when lo! and behold the water instead of running into the lake discharged itself therefrom, flooding the land, which was intended to be drained, in consequence of the surrounding swamp being lower than the body of water composing the lake. The gentleman whose land was thus flooded, to save himself, dug another ditch leading to the head of Pasquotank River - through which the water rushes rapidly, thus greatly diminishing the supply necessary to the practical purposes of the Canal. A great many vessels are now detained in "the Swamp" from the above cause.

Where are these two ditches?

---

46. The Dismal Swamp and Lake Drummond: Early recollections, by Robert Arnold, Norfolk, 1888, pp.10,11.



THE DISMAL SWAMP CANAL WELCOME CENTER welcomes travelers arriving by land and water.

Welcome
Dismal Swamp Canal Cruisers

THE GILMERTON CUT

The Gilmerton Cut: A Monument to Governor Thomas Walker Gilmer 1802-1844 and the Builders of the Dismal Swamp Canal

*The canal lock at Gilmerton, in Chesapeake, Virginia, and a guard gate near Deep Creek, are the only stone locks still in existence in the Dismal Swamp region, and they are both on an abandoned section of the Dismal Swamp Canal called the "Gilmerton Cut." The rest of the canal has been modernized over the years but the Gilmerton Cut and its stone locks have been preserved just as they were in 1843. This remarkable relic is a unique time capsule of the Dismal Swamp Canal as it was during the last century, when all of the locks were not of wood or of wood and steel, but of solid cut stone.

Historian Alexander C. Brown called the Dismal Swamp Canal "the oldest surviving artificial waterway in continuous use in the United States." During its evolution there were three major rebuildings to keep up with the times. The first wooden locks, and then the later stone ones, were replaced by fewer locks with ever-increasing dimensions for larger craft. Most of the old locks were destroyed, but the northern end of the canal - the Gilmerton Cut - was not changed but was abandoned and bypassed. This happy choice has left us a handsome stone lock, beautifully situated - a well-preserved heritage from the old canal days.

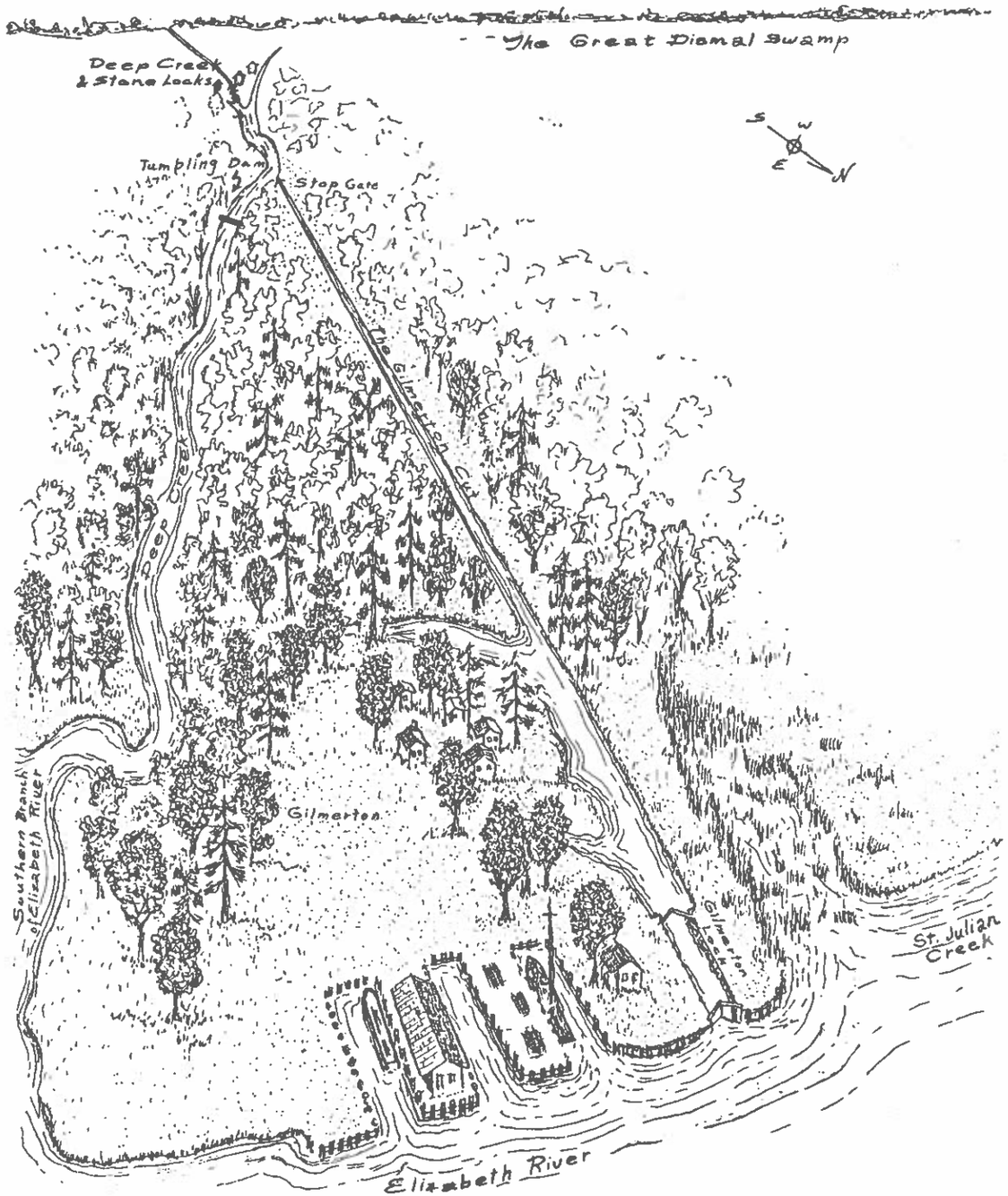
The first locks, some of which had been built and replaced even before the canal was completed, were of wood - juniper timber from the swamp. In the 1810's there were at one time eight wooden locks along the 22-mile main line. During the 1820's these locks were gradually replaced by larger, more substantial stone locks. Although the canal was complete enough to be useful during the War of 1812, it was not until all of the stone locks were finished that satisfactory navigation was obtained. Now boats which could fit into the lock chambers, 90 feet long and 80 feet wide, could travel the length of the canal.

The next stage in the development of the canal was to bypass the frustrating navigation along shallow, winding creeks at each end, by excavating extensions of the canal. In the 1850's the southern end of the canal was extended 3½ miles by Turner's Cut "to avoid that odious part of our navigation, called the Moccasin track."[1] Earlier than this,

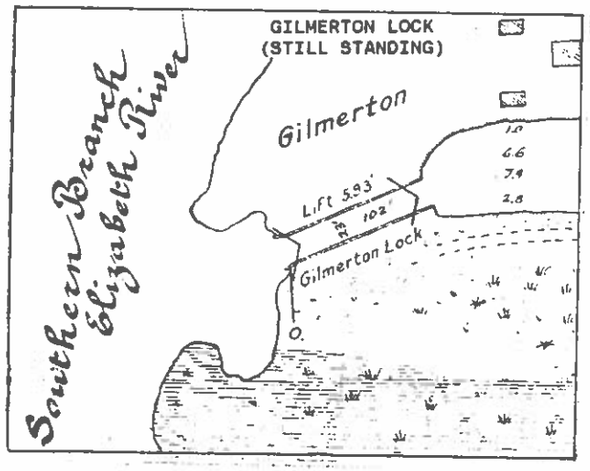
---

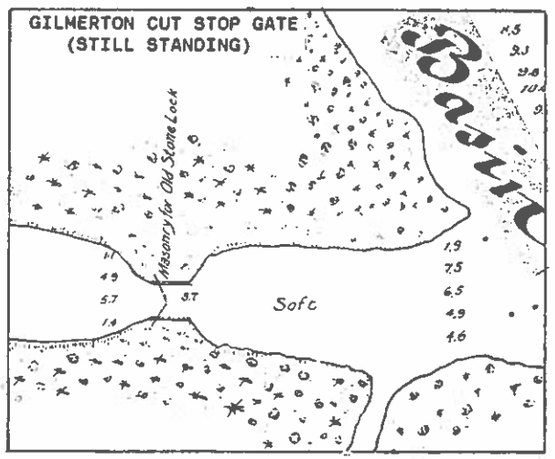
* This is a revision of the original article which appeared in An Historical Review edited by Charles B. Cross, Jr. and published by the Norfolk County Historical Society in 1966. A version was also reprinted in the Winter 1992 Tiller.

1. 41st Annual Report of the Board of Public Works, Dismal Swamp Canal Company, p.106 (1858)



A perspective view of the Gilmerton Cut in its heyday, looking south from the Gilmerton Lock toward Deep Creek Lock, with a very speculative interpretation of the "embryo town" of Gilmerton. (Drawing by W.E. Trout, redrawn by James Kirby for the Norfolk County Historical Society)





Sketches of the Gilmerton Cut's lock and stop gate in 1896, just before the Great Enlargement of the 1890's when they were abandoned. These are now the only stone locks left in the Dismal Swamp, representing a stage in the evolution of the Dismal Swamp Canal.

From a survey of the Dismal Swamp Canal under the direction of Capt. Thos. L. Casey, Corps of Engineers, U.S.A., by F.W. Frost, Asst. Engineer. (Copy courtesy of the Norfolk District, Corps of Engineers)

by 1843, the northern end of the canal had been extended 2¼ miles by the "Gilmerton Cut" to avoid navigating in the bed of Deep Creek.

Building the Gilmerton Cut, 1840-1843

Deep Creek was difficult to navigate because of the tortuous turns in its channel and the silting up which could apparently not be controlled with the dredging equipment of the time. These reasons were put forward in the company's annual report for 1838:[2]

> In the report of November last, the board intimated that the navigation of Deep Creek could not be improved, to make it available, by the operation of dredging. Further observation and examination have confirmed the board in that opinion, and it was determined to abandon the attempt as a useless expenditure of money... the board proceeded to take measures in order to continue the canal to a point where it would debouche, avoiding the inconvenience arising from the increasing shallowness and sinuosity of the creek. The distance of the present north outfall [at Deep Creek locks] to Norfolk will be shortened 2¼ miles; but that advantage is small when compared with the removal of the great inconveniences that are now experienced. It often happens that after a vessel has got through the canal she is detained from three to ten days, according to her draft of water, and sometimes longer... This is particularly the case when the winds prevail from the south and west. By the plan now adopted, a vessel having passed the present north outfall will be in the main southern branch of Elizabeth river in less than two hours, at all times. It will not be attempted to conceal from the stockholders that these improvements will be attended with great expenditure.

The new cut was to be an arrow-straight canal 2¼ miles long, 40 feet wide and 8 feet deep, with a stone lock at its northern end admitting boats up to 100 feet long and 24 feet wide.[3] The lock was to lower boats into the Elizabeth River, or raise them into the canal, a height of 3 to 6 feet, depending upon the tide. On April 21, 1840, John Williston, an "engineer of well known scientific attainments,"[4] contracted to build the new lock for $24,349.35.

Because there was no native stone available in the Tidewater area, it had to be shipped in from quarries a long distance away. When the Deep Creek locks were built in 1820, the square-cut facing stones came from Newark, New Jersey, and the backing stone from quarries at the head of tidewater (the fall line) on the Susquehanna, Potomac, and James rivers.[5]

The canal company records do not reveal the source of the stones, but someday the stones themselves may tell us that. There are two kinds of stone in the Gilmerton Lock, of contrasting color. The lock is a light granite, accented by darker reddish stones where the gates hung - the hollow quoins. The red stone is probably Seneca sandstone, now found in quarries beside the C&O Canal on the Potomac.[6] Several red stone hollow quoins have also been found in the pile of stones which remains from the Culpepper Lock, so the Gilmerton Lock style may have been typical of the other locks, which are long gone.

A part of the new plan called for building a new stone dam, called the Tumbling Dam, across Deep Creek about 1000 feet downstream of Deep Creek Locks, to back the creek up to the locks and up the new cut. Eber Shaw, on January 27, 1842, contracted to build the dam at a cost of $6,500. Because all the traffic would be using the new cut, there was no lock in this dam.[7]

Work on the new canal extension had just started when Virginia's Governor Thomas Walker Gilmer made an official tour of inspection of the various public works of the state including the Dismal Swamp Canal.

A Norfolk newspaper said of his visit:[8]

> The Governor, accompanied by several of our citizens, visited the Dismal Swamp Canal on Thursday [May 7, 1840], passing to the South Lock, and returning to Major Farange's where he spent the night. On Friday the party returned to Portsmouth. We regret that the rain prevented the Governor from visiting the Lake of the Dismal Swamp. He had an opportunity of seeing several vessels of heavy tonnage pass through the locks of the canal, and he expressed his admiration of the vastness and magnificence of this specimen of the internal improvements of this region. On his return he visited the new Cut and approved the policy that suggested that measure.

There are still mementoes of the Governor's visit in the Virginia State Library, including a list of expenses (for servants on the trip to the swamp, 63 cents) and a receipt from French's Hotel in Norfolk for the night of May 8 (the Governor spent $1.00 at the bar).[9] Farange's, on the canal 2¼

---

2. 23rd BPW Report, DSC Co., p.194 (1838).

3. The 1896 map of the canal states that the lock was 23 feet wide. We need to measure it.

4. 32nd Annual Report, BPW, DSC Co., p.221 (1847).

5. House Journal, 1820, Appendix i.

6. Phil Eckman

7. Brown, DSC, p.89 (1971); BPW Report, DSC Co., 1841.

8. The American Beacon and Norfolk & Portsmouth Daily Advertiser, Norfolk, Virginia, Monday morning, May 11, 1840.

9. BPW MSS, Dismal Swamp Canal Box 134, VSL. Folder for 1840.

miles below the North Carolina line, "the original Gretna Green of Lower Virginia," was a popular rendezvous for couples wishing to take advantage of North Carolina's marriage laws. President James Monroe spent the night there in June 1818 on his tour of the Dismal Swamp Canal.[10] Appropriately enough, the new Dismal Swamp Canal Visitor's Center is very close to the site of Major Farange's famous hotel for visitors to the canal.

In 1841 the lock on the new cut was complete, and a canal town had sprung up at the northern end of the Dismal Swamp Canal. As pointed out by the NORFOLK BEACON, town, lock and cut bore the Governor's name:[11]

> We had the pleasure of enjoying on Friday last, a delightful excursion to the canal, and to the EMBRYO town of Gilmerton (named after ex-Governor Gilmer, who visited the spot, he being the first Chief Magistrate who had honored it with his presence, when on his official tour of inspection of the various public works of the state, in May 1840) which we can assure all those who have not seen it, is one of the most beautiful points to be found in this section of the state... The lock at Gilmerton, which is 100 feet by 24, and was constructed by Mr. Williston, is one of the finest and most solid that we have ever seen...

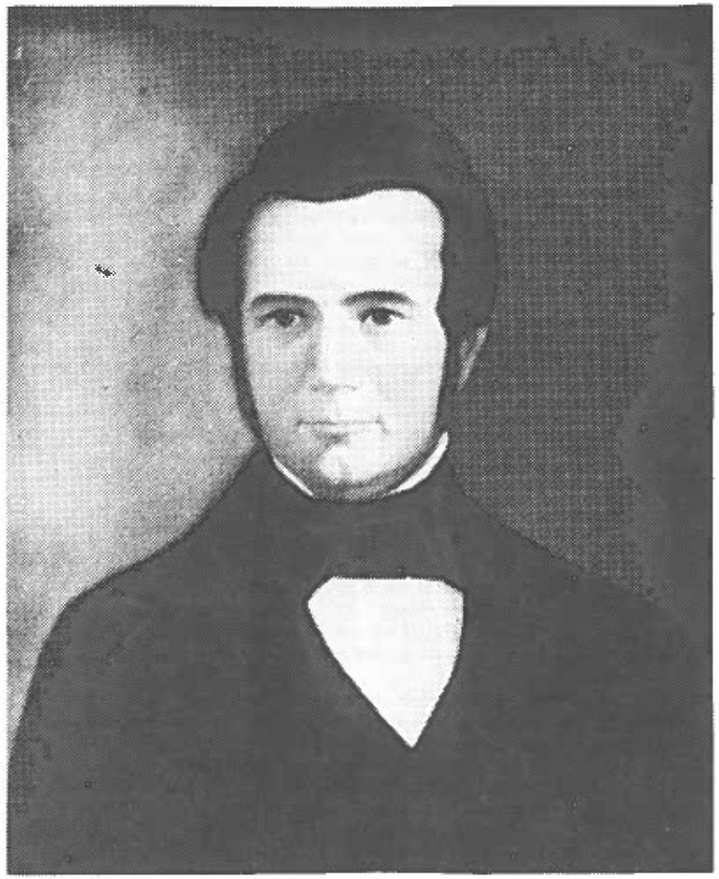
Thomas Walker Gilmer, 1802-1844

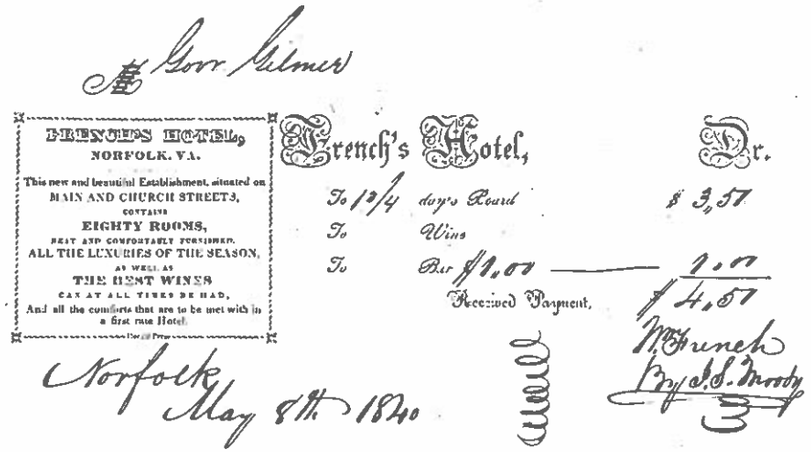
The town of Gilmerton and the lock there were named after Thomas Walker Gilmer, 22nd Governor of Virginia, who was born April 6, 1802, near Charlottesville at "Gilmerton," a homestead not to be confused with the town in Chesapeake. He studied law under his uncle, Peachy R. Gilmer, and practiced in Albemarle County, where he became known for his energy, ambition, and legal talent. He entered politics in 1825, edited the Charlottesville VIRGINIA ADVOCATE supporting General Andrew Jackson in 1828, and was elected to the Virginia House of Delegates, of which he was a member for almost all of the period from 1829 to February 1840, when he was elected Governor. His official tour of all the public works of the state, at his own expense, was typical of his energetic nature. His administration is best known for a dispute with Governor Seward of New York: when the state legislature did not fully support Gilmer's course of action in the dispute, he resigned (a not uncommon event in those days) after only a year in office, and was immediately elected to Congress by his party. On February 15, 1844, he was nominated Secretary of the Navy by President Tyler. Only thirteen days later, while on board the U.S iron-hull steamer PRINCETON in the Potomac near Mount Vernon, he and others including the

---

10. Jesse F. Pugh, The Hotel in the Great Dismal Swamp, Old Trap, N.C., 1964.

11. Norfolk Beacon, May 2, 1842, from a compilation of articles in Norfolk papers referring to the Dismal Swamp Canal, by John E. Emmerson, Jr., Portsmouth, VA, 1956 (Mariners Museum).





Gov. Gilmer

BRENGLE'S HOTEL, NORFOLK, VA.
This new and beautiful Establishment, situated on MAIN AND CHURCH STREETS, contains EIGHTY ROOMS, neat and comfortably furnished, ALL THE LUXURIES OF THE SEASON, as well as THE BEST WINES can at all times be had, And all the comforts that are to be met with in a first rate Hotel.

French's Hotel, Dr.

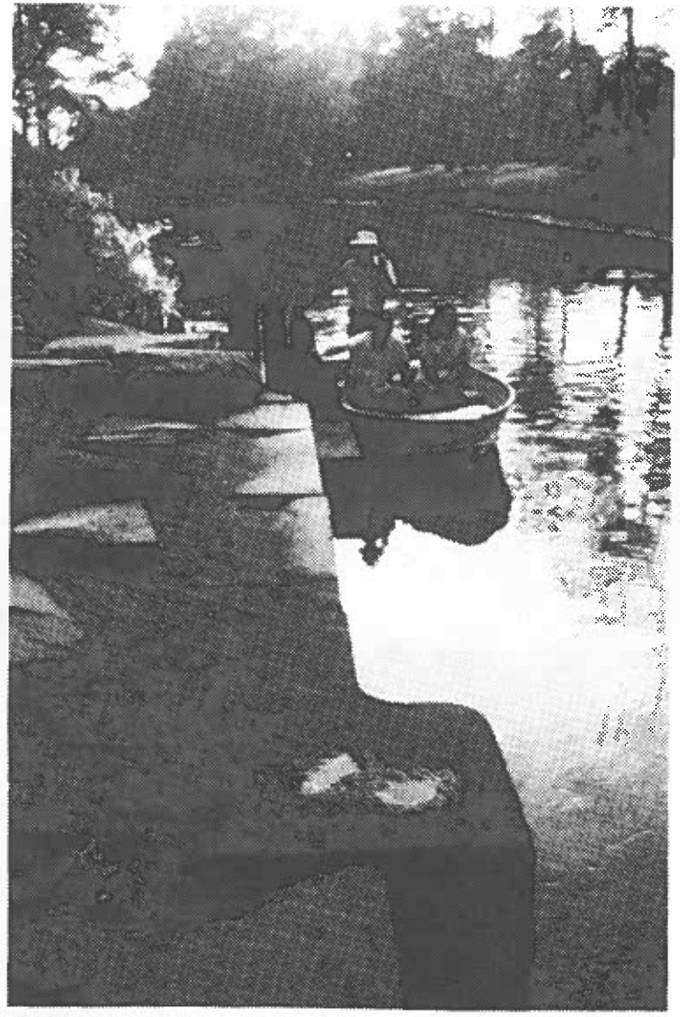
To 1 3/4 days Board $ 3,50
To Wine
To Bar $1,00 —— 1,00
Received Payment, $ 4,50

Norfolk May 8th 1840

M. French
By J.S. Moody

Gilmerton and the Gilmerton Cut are named after Thomas Walker Gilmer, the 22nd Governor of Virginia, who made an official visit to the cut in May, 1840 when it was under construction, and who died tragically in 1844 just after it was finished. His portrait at left hangs in the Capitol in Richmond (Library of Virginia).

During his trip to the canal, Governor Walker spent the night of May 8th at French's Hotel in Norfolk. His receipt above is still in the archives of the Library of Virginia.



ABOVE: Looking south down the Gilmerton Cut from Shell Road, in 1964. At high tide, water still fills the cut but road crossings make it virtually impassable today.

RIGHT: The east side of the Gilmerton Cut's Stop Gate in 1986, looking south. It was a half-lock, with a single pair of gates which could be closed to keep floods in Deep Creek out of the cut. Some of the stones need to be reset.

Secretary of State were killed when an experimental gun named the "Peacemaker" burst.[12]

The Gilmerton Cut, 1843-1899

When the Tumbling Dam across Deep Creek was finally finished in 1843 the Gilmerton Cut was ready for use. The dam formed a capacious basin three miles in circumference, backing the waters of Deep Creek into Deep Creek Locks and into the Gilmerton Cut. To keep Deep Creek floodwaters out of the cut a stone guard gate was constructed in 1848 near the southern end. This gate had only a single pair of miter gates, which were normally kept open, but which could be closed when necessary. Much of the carefully shaped stonework of the guard gate remains in good condition today. Despite this precaution the banks occasionally washed out during heavy floods, a problem plaguing all river and canal works. The Tumbling Dam, too, was subject to occasional breaches.

The Gilmerton Lock itself also had a special problem. It was probably the only lock in Virginia susceptible to the Teredo, or shipworm, a wood-boring mollusc, because it was exposed to salt water. Normally, unless built directly on bedrock, stone locks were constructed on wood piling or crib foundations, with wooden floors, which being always covered with water were quite durable. But because of the teredo worms in the Gilmerton Lock, the wooden floor and the miter sills (against which the gates closed at the bottom) had been eaten away by 1848, and were replaced with stone "in a substantial manner."[13] The Gilmerton Lock may then also be the only lock in Virginia (not built on bedrock) with a stone masonry floor. It must still be there to be rediscovered, 13 feet below the top of the lock wall, and seven feet below mean water level.[14] It would be interesting to look and see.

The lock gates were of wood as well, so they were also subject to digestion by the shipworm and had to be replaced with copper-sheathed timbers. Despite such precautions, however, one day the northern gates suddenly collapsed and were found "eaten to a perfect honeycomb."[15]

Around the lock, at the northern end of the Dismal Swamp Canal, the town of Gilmerton grew up and became the transfer

---

12. National Cyclopaedia of American Biography, James T. White & Co., N.Y., 1894, V.5, pp.449-50; Dictionary of American Biography, Scribners, N.Y., 1943, V.7, pp.308-309; William and Mary Quarterly, V.15, pp.226-227 (1907); "The PRINCETON Explosion," U.S. Naval Institute Proceedings, V.52 No.11, November 1926, pp.2224-2245.

13. 33rd BPW Report, DSC Co., p.339 (1848).

14. Measurements from a map in the U.S. Corps of Engineers office, Norfolk, entitled "Profile of the Dismal Swamp Canal from the Survey of 1895-6," by Thomas L. Casey (Map No. 8-651).

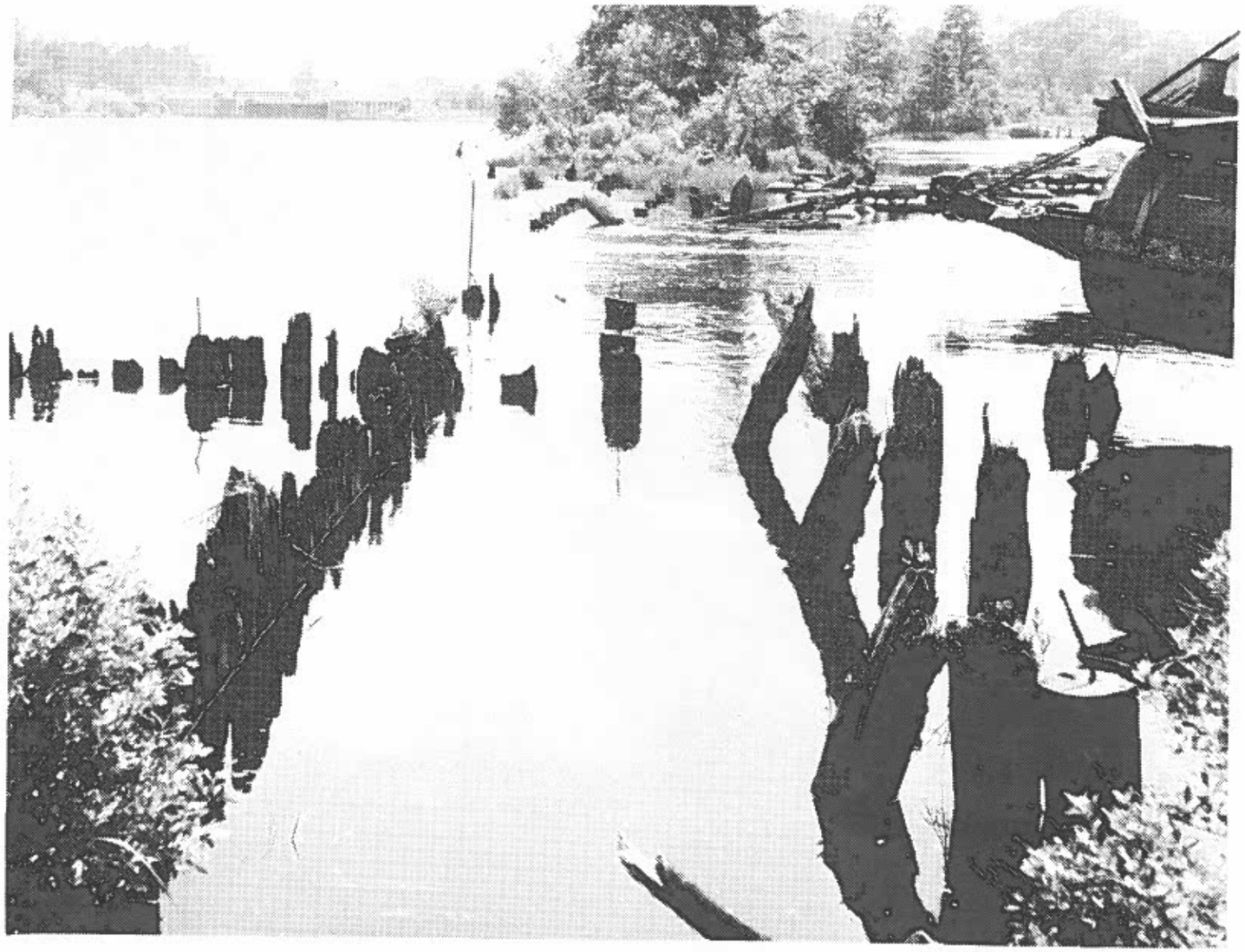
15. 34th BPW Report, DSC Co., p.182 (1849).

THE GILMERTON LOCK IN 1947

ABOVE: Alexander C. Brown's classic photo of the Gilmerton Lock, taken in 1947 (Courtesy of the Mariners Museum, Newport News, Virginia). The view is from the Elizabeth River, looking south.

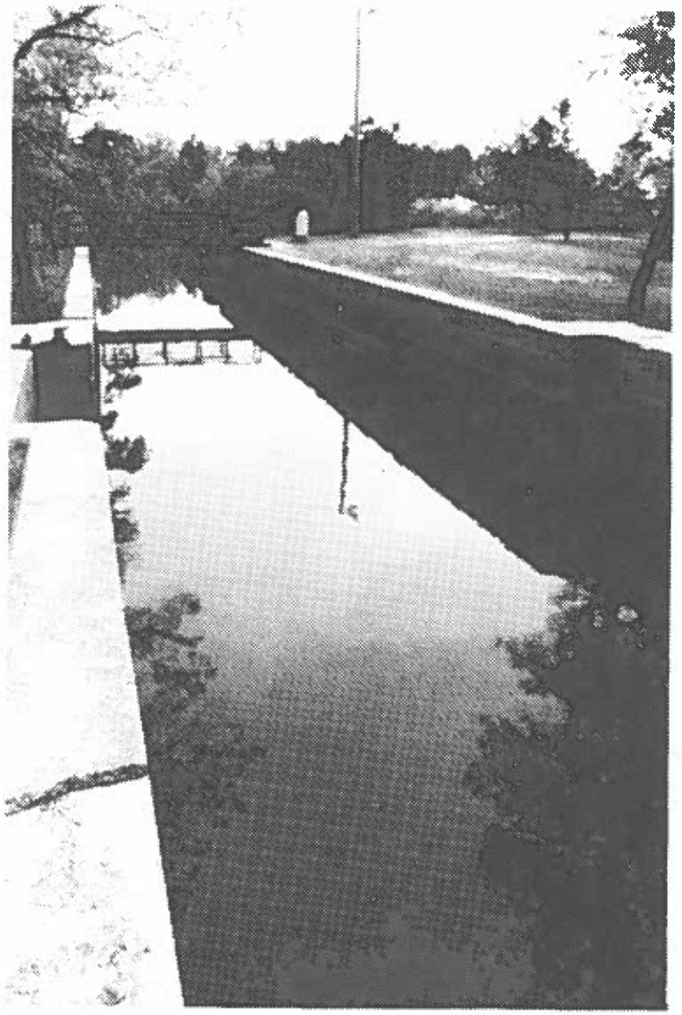
RIGHT: This 1993 photo by VC&NS archivist Phil Eckman shows what has happened to the Gilmerton Lock since 1947. The view is east, looking up the Elizabeth River. Since 1947 the shoreline has eroded away and many of the lock stones have fallen into the water and need to be reset. Meanwhile, Atlantic Energy Company, owner of the property, has taken pains to protect the site

THE "NEW" TUMBLING DAM IN 1968



LEFT: Looking south along the remains of the "new" Tumbling Dam, a barrier across Deep Creek built to keep the water in the creek backed up to the town's docks after the Gilmerton Cut was abandoned in 1899. The dam is now in Deep Creek Locks Park; Deep Creek Lock is in the background at left. Photograph courtesy of the late Alexander C. Brown, who took it in 1968.

RIGHT: To let small craft through the New Tumbling Dam this 100-foot long lock was built of wood capped with concrete. This view, looking east toward Deep Creek Locks, was taken in 1982. Called the "Cross Lock" it is now in Chesapeake's Deep Creek Locks Park.



and storage point for goods entering and leaving the canal. Here, also, barges waited for a tow to Norfolk. By 1835 a rule had forbidden sailing on the canal, since it led to collisions and torn banks,[16] so boats in the canal were either poled, pulled by mules from the bank, or towed by canal-sized steam tugs. At either end of the canal, the Elizabeth and Pasquotank rivers were navigable only with steam or sail power, so boats not self-propelled had to transfer their cargoes to schooners or steamers, or be towed by them. Hardly anything is said in the records about the town of Gilmerton, and its life. We can imagine that there are still tales to be heard around Gilmerton of its heyday as the northern terminus of the Dismal Swamp Canal.

The Abandonment of the Gilmerton Cut

In 1859 the Dismal Swamp Canal's great rival, the Albemarle and Chesapeake Canal, first opened for business. It, too, connected Chesapeake Bay with Albemarle Sound, but it was designed for larger craft, having only one large lock to take care of the tide. The Dismal Swamp Canal, with seven small locks, was at a complete disadvantage.

After several decades of planning, the Dismal Swamp Canal was bought in 1892 by the Lake Drummond Canal and Water Company. By 1899 the company had completely rebuilt the canal, widening and deepening the channel. All of the locks were eliminated except two, at Deep Creek and South Mills, and these were rebuilt of timber with larger chambers, 40 by 250 feet, just as wide and 30 feet longer than the rival lock on the Albemarle & Chesapeake. Today, the locks on both canals are even larger than that. The Dismal Swamp Canal's locks, rebuilt again in 1940, are now 58 (52?) by 300 feet, six times the area of the old Gilmerton Lock's 24 by 100 feet.

But the Gilmerton Cut and its locks were not enlarged in 1899; instead, the Cut was abandoned. Once again, Deep Creek became the main channel. A cut was made through the old Tumbling Dam for the new channel, and Deep Creek was extensively dredged and straightened, removing the impediments which had first caused its abandonment 56 years before.

With the old Tumbling Dam gone, Deep Creek was no longer backed up and flowing through the Gilmerton Cut. This left the wharves in the town of Deep Creek high and dry when the tide went out. To back up the water again to the wharves and into the Gilmerton Cut, a new Tumbling Dam was constructed across the creek, further upstream before it ran into the newly-dredged navigation channel. This new earthen dam had a wooden spillway and a small 100-foot long lock across it called the "Cross Lock," to pass small craft through the dam. This must have extended the working life of the Gilmerton Cut, but not past 1916 when a low fixed bridge across it effectively stopped all through traffic.

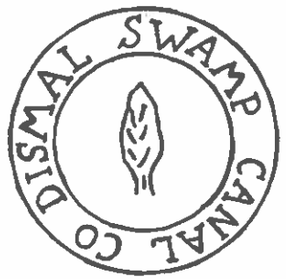
---

16. Emmerson, Dismal Swamp Canal compilation, Norfolk Herald, Jan. 20, 1836.

The Gilmerton Cut Today

Over the years, the Gilmerton Cut has been crossed and blocked by several roads but it is still watered throughout most of its length and it deserves to be carefully saved as a future recreation corridor. The Gilmerton Lock at its northern end is still magnificent (although in need of repair), but it is not ordinarily accessible to the public because it is beside an active liquid natural gas facility. The LNG company, Atlantic Energy, Inc., quite rightly keeps people away for safety reasons, while taking good care of the lock for future generations when someday, we hope, it will be the proud centerpiece of a Gilmerton Lock Park.[17] At the southern end of the Cut, the stone guard gate can still be visited by water, but it has been much battered by the elements and needs to have a number of stones hoisted back in position.

Between the guard gate and Deep Creek Locks, the "new" Tumbling Dam can still be seen in Chesapeake's marvelous Deep Creek Lock Park, complete with picnic shelters and a lookout tower for watching yachts locking through. The Tumbling Dam's wooden spillway has since rotted away, leaving the wharves (now a residential area) and the Gilmerton Cut tidal again, and the Cross Lock no longer has its gates. But someday we hope the Gilmerton Cut can be re-opened to once again allow boaters to voyage through an original part of the Dismal Swamp Canal built over 150 years ago, a permanent memorial to Governor Thomas Walker Gilmer and the builders of the Dismal Swamp Canal.



---

17. A.C. Brown, "Chesapeake's Stone Lock Would Make a Fine Park," New Dominion Magazine (in Sunday Newport News Daily Press) May 30, 1971.

ALEXANDER C. BROWN 1905–1993

Alex Brown, a charter member of the Virginia Canals and Navigations Society and of the American Canal Society, passed away on February 7, 1993 at the age of 87. He was the author of over a dozen books, including The Dismal Swamp Canal and Juniper Waterway, the history of the Albemarle and Chesapeake Canal.

Alex had a great love of the sea, which blossomed after his graduation from Yale University in 1928, when he and four classmates sailed around the world for two years in a Nova Scotia schooner. His travels were documented in his first book, Horizon's Rim.

After a brief stint at Newport News Shipbuilding, Mr. Brown joined the staff of the Mariners' Museum in 1934 as corresponding secretary. During World War II, he served in the Navy and subsequently joined the staff of naval historian Adm. Samuel Eliot Morrison in Washington, D.C., to compile a multi-volume history of the war's naval operations. In 1965 he retired from the Navy Reserve as a commander.

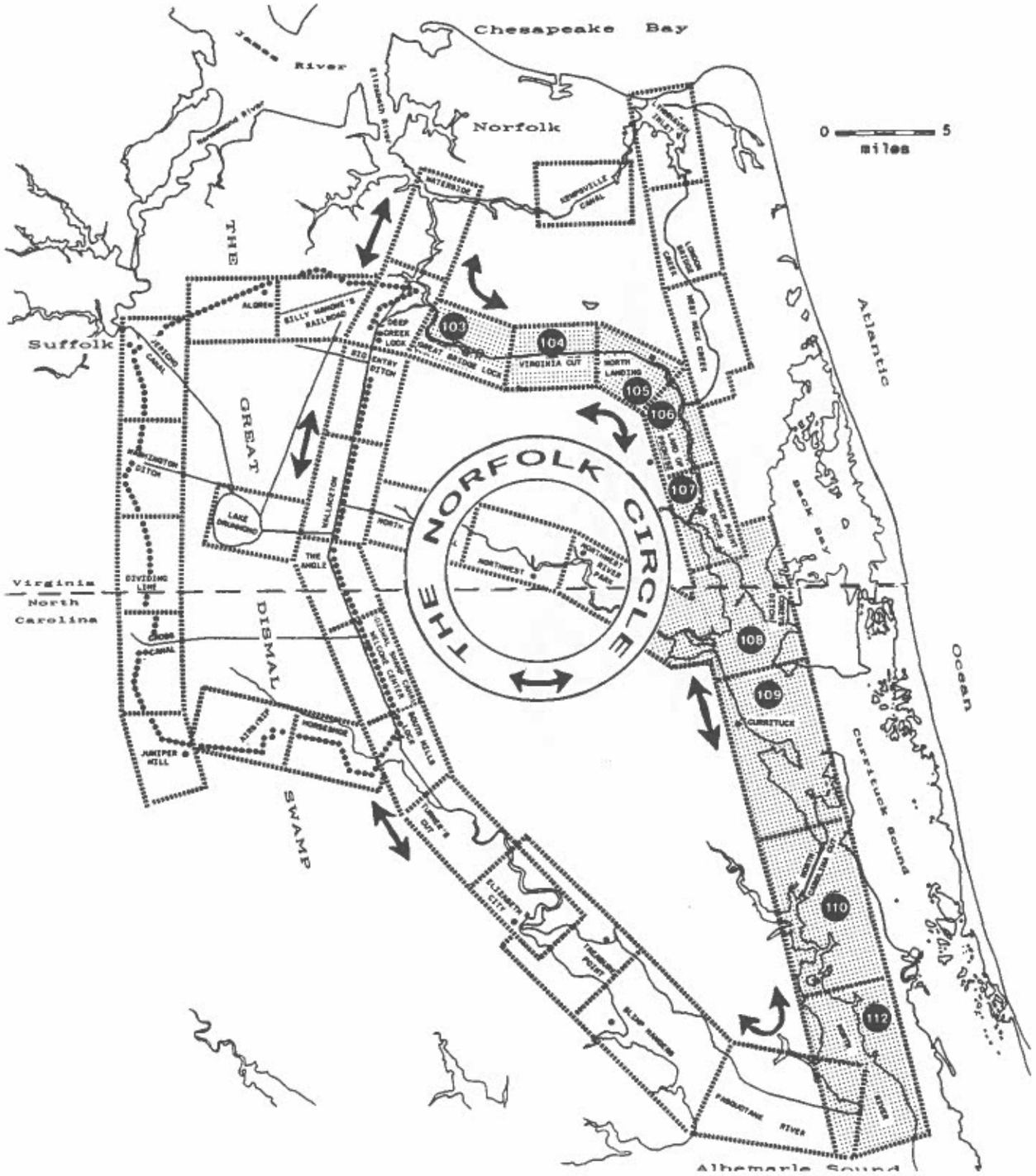
He rejoined the Mariners' Museum staff after the war and became chief of publications. After receiving his master's degree in history from William and Mary in 1951, he became literary editor at the Newport News Daily Press. When he retired in 1973, he returned to the Museum as a volunteer guide.

Some of his awards are the Archer M. Huntington Medal from the Mariners' Museum, the City of Newport News' Meritorious Service Award, the Christopher Newport College Distinguished Service Medal and an honorary doctorate from Christopher Newport College. For his Dismal Swamp Canal book he was awarded the Jefferson Davis Medal by the United Daughters of the Confederacy.

Members of VC&NS will remember Alex at our 1982 annual meeting, which he helped organize. After a field trip to the Albemarle and Chesapeake Canal, we had a posh champagne reception in the Mariners' Museum, a slide show on the A&C by Alex Brown, and a chance to buy his new book on the subject in the gift shop. Look him up in the indexes to The Tiller and American Canals, and you will find a number of his canal articles. One of them, on the Patowmack Canal, was reprinted as a booklet by VC&NS and is still in print.

Alas, Alex's book on the Dismal Swamp Canal has been long out-of-print, but the Norfolk County Historical Society of Chesapeake hopes to bring it back someday. We owe it to Alex Brown, and to the canal, to make The Dismal Swamp Canal available again.

(From the Spring 1993 Tiller, based on Candy McCrary's article in the Newport News Daily Press. Photo by H. McNamara in the November 5, 1981 Currituck County N.C. News, courtesy of William E. Vest.)

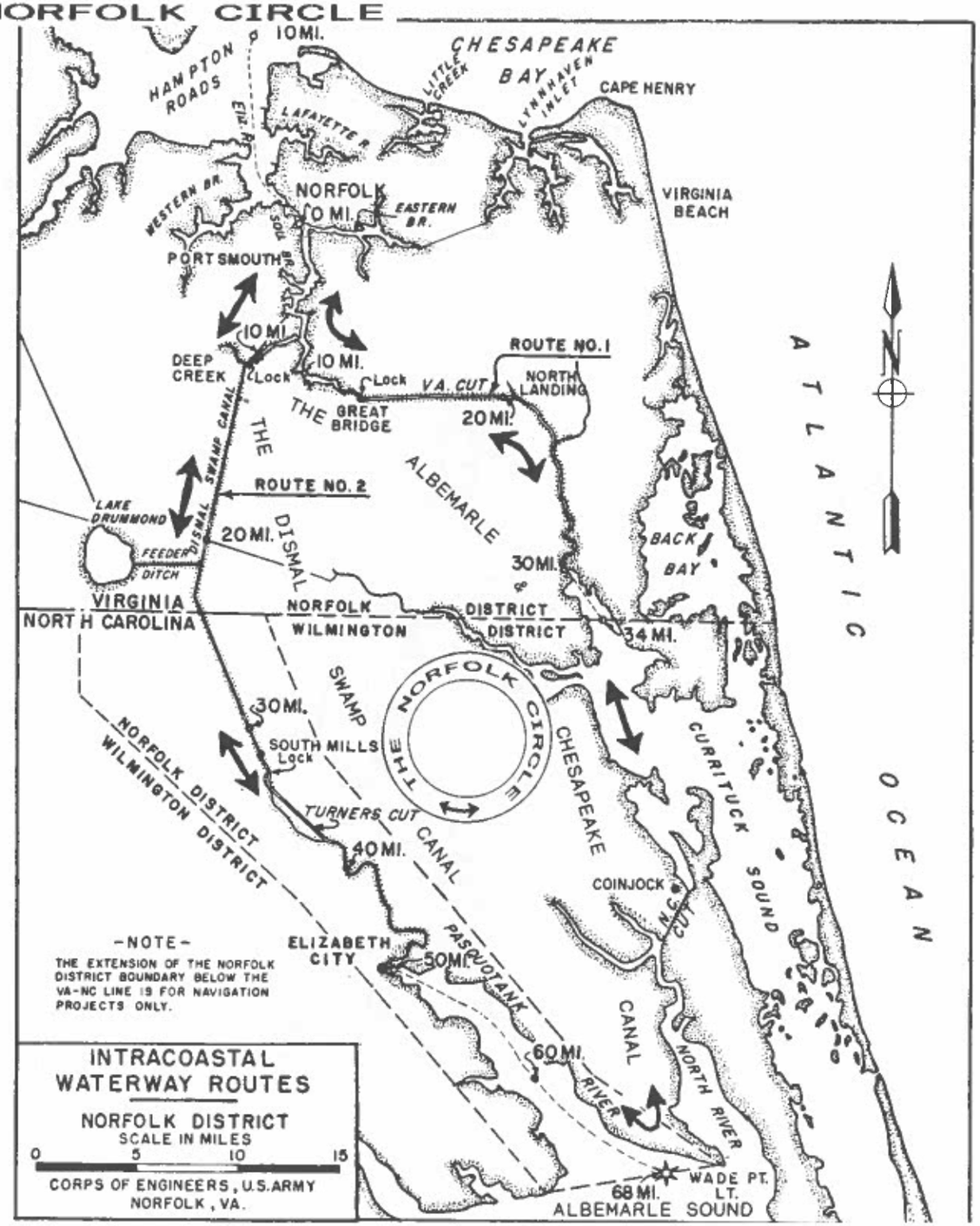


PART 3:

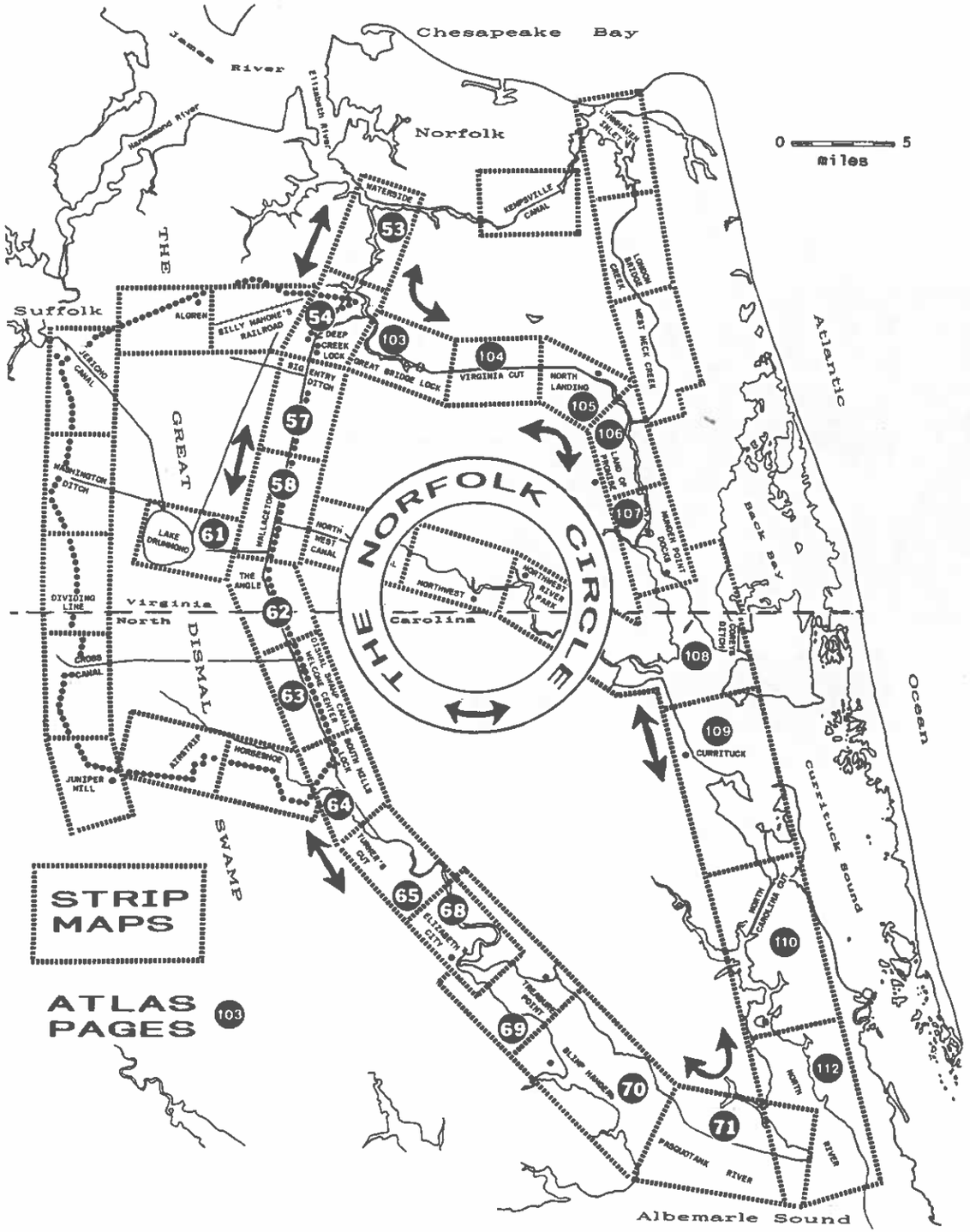
CRUISING THE ALBEMARLE & CHESAPEAKE CANAL: THE WATERWAY DREDGED BY "IRON TITANS"

THE NORFOLK CIRCLE

STRIP MAPS IN PART 3 ARE SHADED


HAMPTON ROADS
10MI.
CHESAPEAKE BAY
LITTLE CREEK
LYNNHAVEN INLET
CAPE HENRY
ELIZ. R.
LAFAYETTE R.
WESTERN BR.
SOUTH BR.
NORFOLK 0 MI.
EASTERN BR.
VIRGINIA BEACH
PORT SMOUTH
10 MI.
10 MI.
DEEP CREEK Lock
10 MI.
Lock
VA. CUT
ROUTE NO. 1
NORTH LANDING
THE GREAT BRIDGE
20MI.
THE ALBEMARLE
ROUTE NO. 2
LAKE DRUMMOND
DISMAL SWAMP CANAL
FEEDER DITCH
20 MI.
DISMAL
30MI.
&
BACK BAY
VIRGINIA
NORTH CAROLINA
NORFOLK DISTRICT
WILMINGTON DISTRICT
34 MI.
SWAMP
30MI.
SOUTH MILLS Lock
THE NORFOLK CIRCLE
CHESAPEAKE
CURRITUCK SOUND
NORFOLK DISTRICT
WILMINGTON DISTRICT
TURNERS CUT CANAL
40MI.
COINJOCK
ATLANTIC OCEAN
-NOTE-
THE EXTENSION OF THE NORFOLK DISTRICT BOUNDARY BELOW THE VA-NC LINE IS FOR NAVIGATION PROJECTS ONLY.
ELIZABETH CITY
50MI.
PASQUOTANK
CANAL
60MI.
NORTH RIVER
NORTH RIVER
WADE PT. LT.
68MI.
ALBEMARLE SOUND
INTRACOASTAL WATERWAY ROUTES
NORFOLK DISTRICT
SCALE IN MILES
0 5 10 15
CORPS OF ENGINEERS, U.S.ARMY
NORFOLK, VA.

CRUISING THE NORFOLK CIRCLE



THE NORFOLK CIRCLE, SECTION TWO: CRUISING THE ALBEMARLE & CHESAPEAKE CANAL
(See PART 2 of this atlas for the Dismal Swamp Canal part of the circle)

SEE PAGE 51 FOR AN INTRODUCTION TO THE NORFOLK CIRCLE CRUISE.
THE CIRCLE CAN BE NAVIGATED IN EITHER DIRECTION. IN THIS ATLAS THE ITINERARY ON PAGE 52 FOLLOWS THE CIRCLE COUNTER CLOCKWISE, GOING SOUTH ON THE DISMAL SWAMP CANAL FROM NORFOLK. THE ITINERARY ON THIS PAGE COMPLETES THE CIRCLE, GOING NORTH ON THE ALBEMARLE & CHESAPEAKE CANAL BACK TO NORFOLK.
FOLLOW THE A&C CANAL STRIP MAPS IN REVERSE ORDER FOR DETAILS.

ATLAS PAGE — **ITINERARY**

112 **A&C CANAL STATUTE MILE 66.4:** Site of **CAMDEN POINT LIGHTHOUSE**, now flashing green light "173" at the **MOUTH OF THE NORTH RIVER** on Albemarle Sound. The river is a couple of miles wide here, but it is so shallow that most boats must carefully stick to the dredged channel. In contrast to the Dismal Swamp Canal, this route is the one used by heavy commercial vessels.

110 **MILE 52:** Canoes and small boats can explore the upper reaches of the **NORTH RIVER** and **INDIANTOWN CREEK**, part of the Albemarle Region Canoe and Small Boat Trails System.

MILE 50: THE NORTH CAROLINA CUT, with marinas, restaurants and motels in **COINJOCK**. This is one of the two A&C cuts through dry land, made in the 1850's. It was blocked by both Confederates and Yankees during the Civil War.

109 **MILE 45: ENTER NORTH LANDING RIVER.** The **KNOTTS ISLAND FERRY** crosses here at historic **CURRITUCK.**

108 **MILE 37: NORTH WEST RIVER** was once connected with the Dismal Swamp Canal by the **NORTH WEST CANAL** (See Part 4).

MILE 34: THE STATE LINE, surveyed by William Byrd's party in 1728. They paddled from the North West River to the coast in "piraguas."

107 **MILE 32: "FOOTPRINTS" OF MUNDEN DOCKS** on right. At one time a major port for boats offloading ducks, watermelons and other goods into rail cars destined for Norfolk and the eastern seaboard.

NOTE THE CHANGE IN SCALE OF THE STRIP MAPS, as we change from navigation charts to topo maps.

MILE 30: Enter the winding upper reaches of **NORTH LANDING RIVER**, with tributaries to explore by small craft. Many of the oxbows, formed by cut-offs, have an interesting and potentially historic array of **BOAT WRECKS.**

106 **MILE 26.5: POCATY CREEK** (L) and **WEST NECK CREEK** (R) are parts of the North Landing State Scenic River, worth exploring by small craft. A canal connects West Neck with Lynnhaven Bay (See PART 4).

105 **MILE 20: NORTH LANDING** was the head of navigation on the river until the A&C Canal's **VIRGINIA CUT** was excavated in 1859.

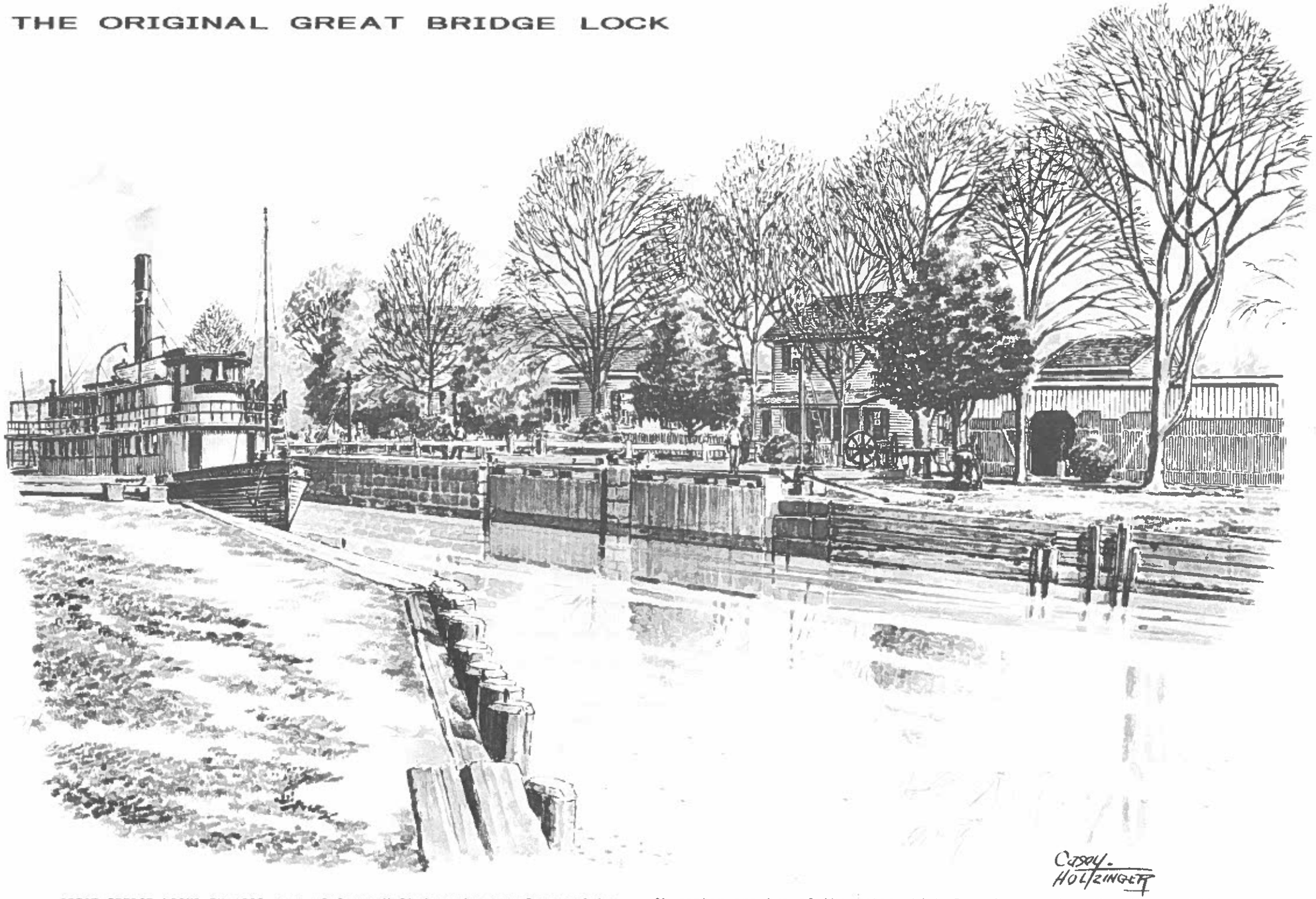
104 **MILE 11.5 - 19.5: THE VIRGINIA CUT.** Bridges across the cut lift only at set times, so keep to the speed limit.

103 **MILE 11.5: GREAT BRIDGE LOCK**, with set hours of operation, to the **ELIZABETH RIVER.** Depending on the wind direction in Currituck Sound, and the tide in the Elizabeth River, the water level can drop at the lock in either direction. Great Bridge Lock is therefore an unusual "reverse head" lock with a double set of gates which can raise or lower your boat several feet in either direction. Whenever both water levels are the same, all of the lock gates are opened.

54 **MILE 7: JUNCTION WITH THE DISMAL SWAMP CANAL** (See Part 2).

53 **MILE 0.5: WATERSIDE in NORFOLK. COMPLETION OF THE NORFOLK CIRCLE!**

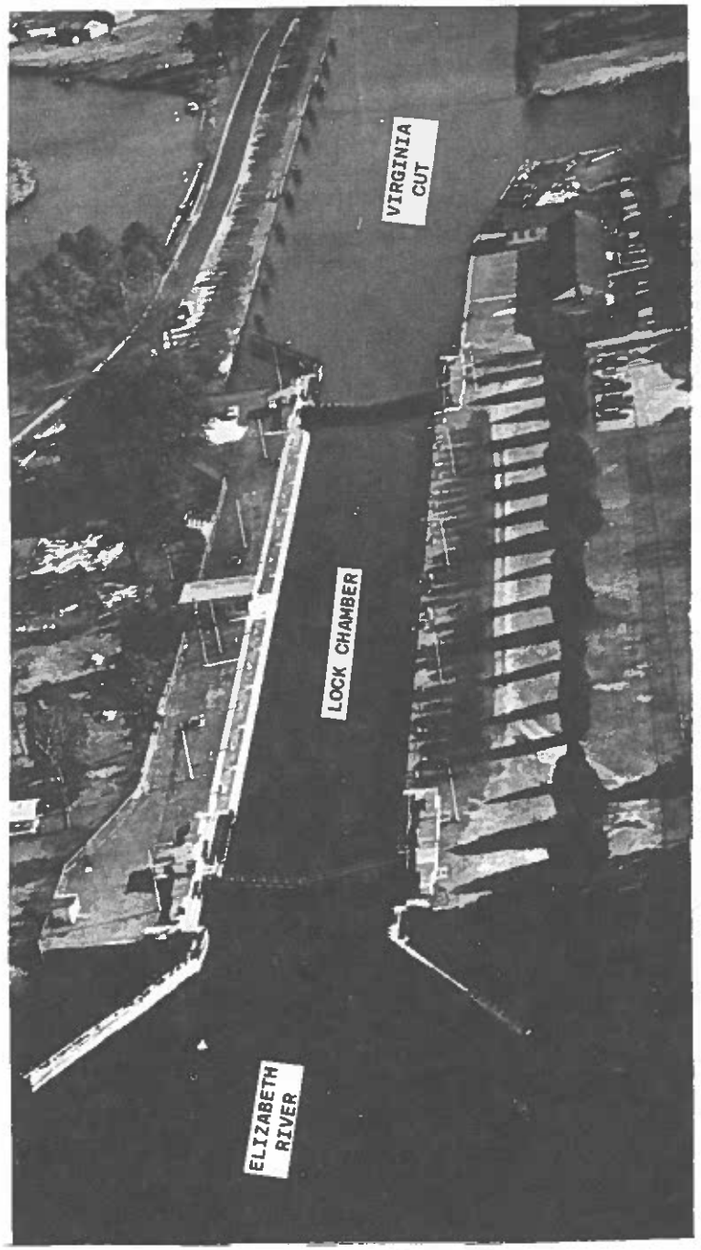
THE ORIGINAL GREAT BRIDGE LOCK



GREAT BRIDGE LOCKS IN 1900, one of Casey Holtzinger's marvelous prints, reproduced with permission of the Imperial Gallery in Virginia Beach. It is meticulously based on the only known photograph of the original 1859 stone lock, published in 1895 in ART BOOK OF NORFOLK AND VICINITY.

At center are two of the gates which face in opposite directions. Both are open, swung back into their gate recesses in the lock wall. Behind the gates are two large wheels which we think were attached to poles and cables which pushed the gates closed and pulled them open.

HOW GREAT BRIDGE LOCK WORKS

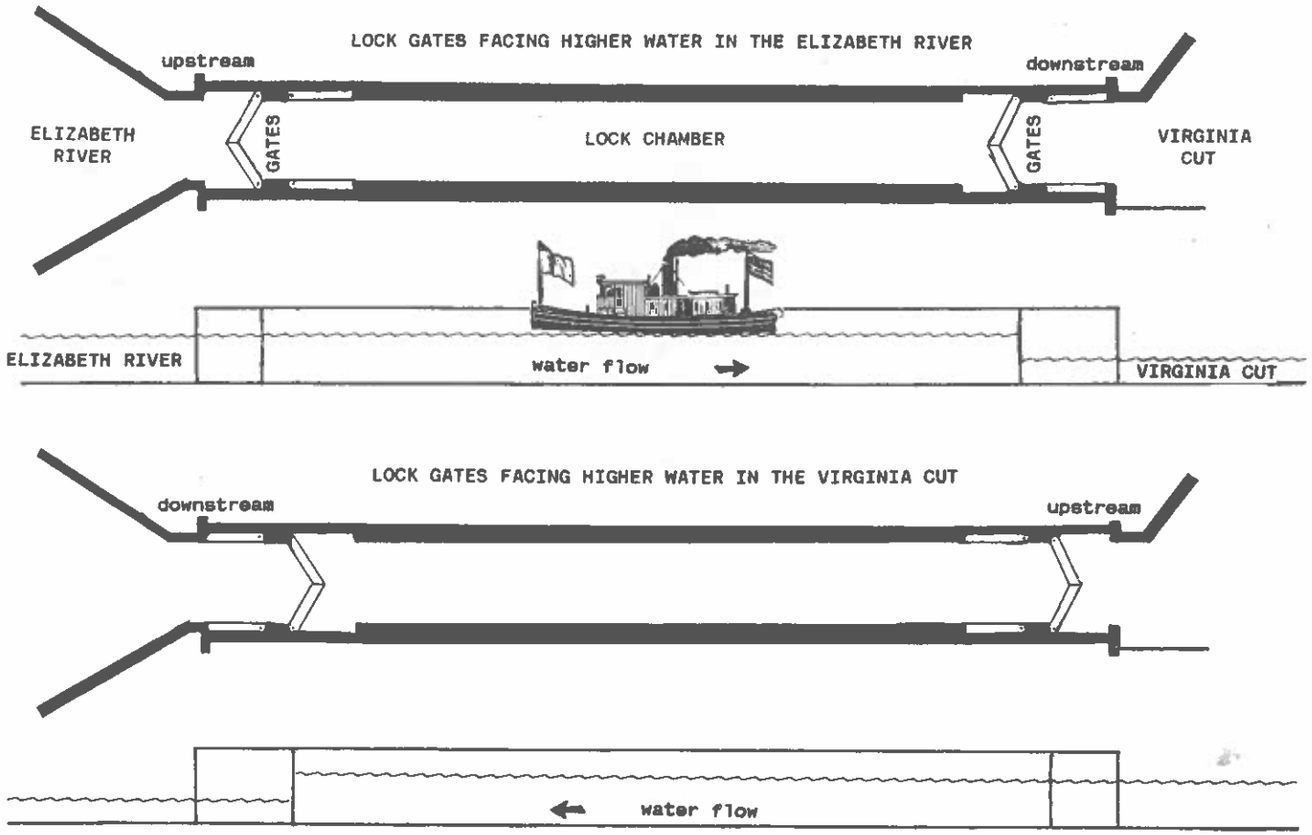


Great Bridge Lock today, from a Corps of Engineers brochure. Here the "V" of the gates is pointing towards the Elizabeth River, so when the photo was taken the river was at a higher level than the Virginia Cut.

When the lock was first built in 1859 the company claimed that it was "probably the first lock ever constructed which would allow vessels to lock up or down either way." This was necessary because the drop in the canal could be in either direction depending upon the tide in Elizabeth River, and the set of the wind in Currituck Sound.

Like most locks in the world, Great Bridge Lock has "miter gates" which when closed, meet at an angle pointing upstream to resist the water pressure. Ordinary locks have one pair of miter gates at each end, pointing upstream. For Great Bridge Lock, "upstream" can be in either direction, so it has an extra pair of lock gates at each end, facing the other direction.

Great Bridge Lock works like an ordinary lock, but with the two pairs of gates facing the wrong way folded out of the way in gate recesses (niches) in the lock walls.



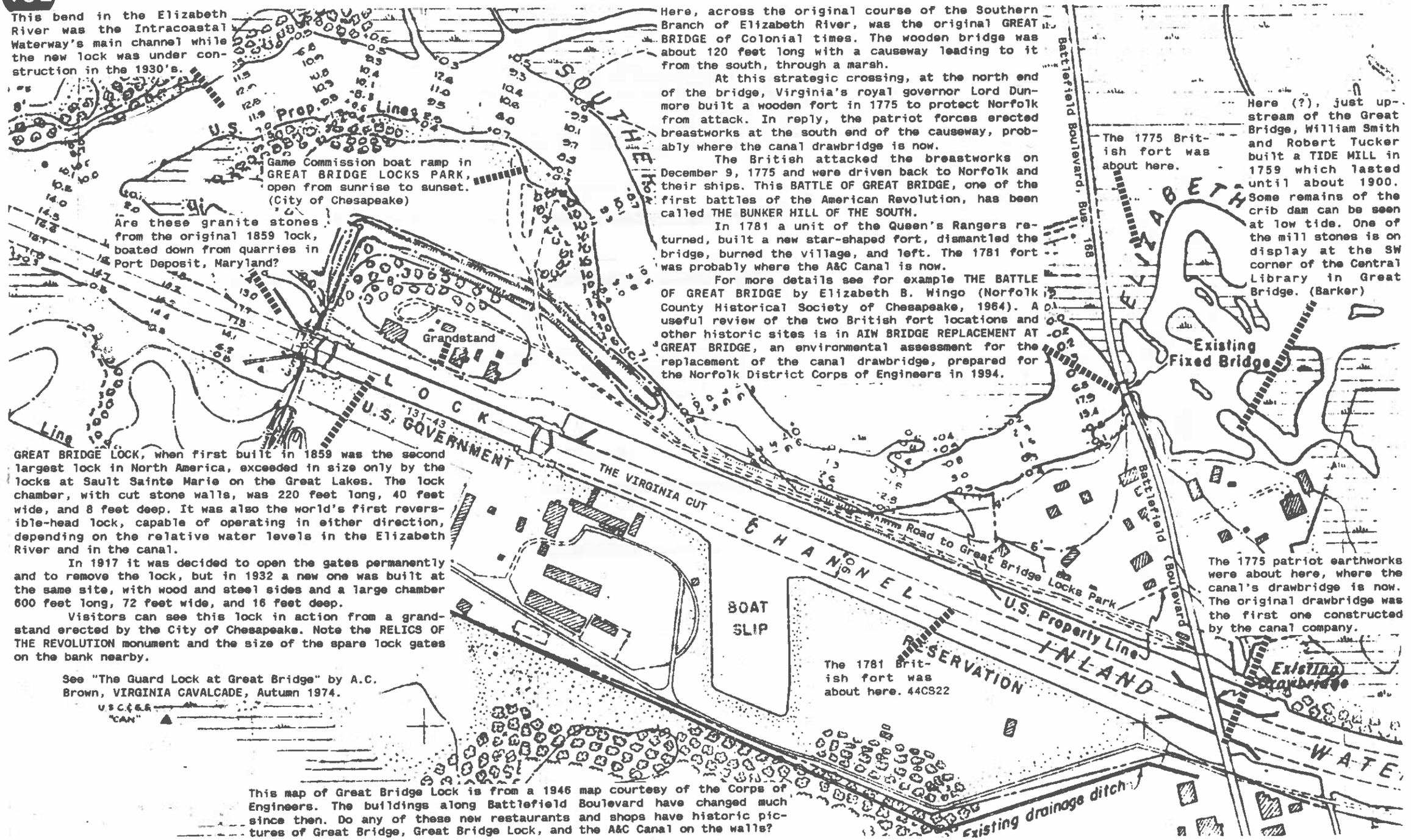
A boat going downstream enters the lock through the upstream gates, with the downstream gates closed. Then the upstream gates are closed. The water in the lock is drained off downstream through large underground culverts in the south side of the lock. When the boat is at the downstream water level the downstream lock gates can be opened to let the boat out.

A boat going upstream enters the lock with the upstream gates closed. Then the downstream gates are closed, the water is let in, through the underground culverts, and when the lock is full the upper gates can be opened to let the boat out.

Whenever the river and the cut are at the same level, all eight gates are kept open and no lockage is required.

A lock is one of the most elegant of man's inventions, using gravity for water flow - no pumping is involved.

GREAT BRIDGE



This bend in the Elizabeth River was the Intracoastal Waterway's main channel while the new lock was under construction in the 1930's.

Here, across the original course of the Southern Branch of Elizabeth River, was the original GREAT BRIDGE of Colonial times. The wooden bridge was about 120 feet long with a causeway leading to it from the south, through a marsh.

At this strategic crossing, at the north end of the bridge, Virginia's royal governor Lord Dunmore built a wooden fort in 1775 to protect Norfolk from attack. In reply, the patriot forces erected breastworks at the south end of the causeway, probably where the canal drawbridge is now.

The British attacked the breastworks on December 9, 1775 and were driven back to Norfolk and their ships. This BATTLE OF GREAT BRIDGE, one of the first battles of the American Revolution, has been called THE BUNKER HILL OF THE SOUTH.

In 1781 a unit of the Queen's Rangers returned, built a new star-shaped fort, dismantled the bridge, burned the village, and left. The 1781 fort was probably where the A&C Canal is now.

For more details see for example THE BATTLE OF GREAT BRIDGE by Elizabeth B. Wingo (Norfolk County Historical Society of Chesapeake, 1964). A useful review of the two British fort locations and other historic sites is in AIW BRIDGE REPLACEMENT AT GREAT BRIDGE, an environmental assessment for the replacement of the canal drawbridge, prepared for the Norfolk District Corps of Engineers in 1994.

Here (?), just upstream of the Great Bridge, William Smith and Robert Tucker built a TIDE MILL in 1759 which lasted until about 1900. Some remains of the crib dam can be seen at low tide. One of the mill stones is on display at the SW corner of the Central Library in Great Bridge. (Barker)

The 1775 British fort was about here.

Game Commission boat ramp in GREAT BRIDGE LOCKS PARK, open from sunrise to sunset. (City of Chesapeake)

Are these granite stones from the original 1859 lock, boated down from quarries in Port Deposit, Maryland?

GREAT BRIDGE LOCK, when first built in 1859 was the second largest lock in North America, exceeded in size only by the locks at Sault Sainte Marie on the Great Lakes. The lock chamber, with cut stone walls, was 220 feet long, 40 feet wide, and 8 feet deep. It was also the world's first reversible-head lock, capable of operating in either direction, depending on the relative water levels in the Elizabeth River and in the canal.

In 1917 it was decided to open the gates permanently and to remove the lock, but in 1932 a new one was built at the same site, with wood and steel sides and a large chamber 600 feet long, 72 feet wide, and 16 feet deep.

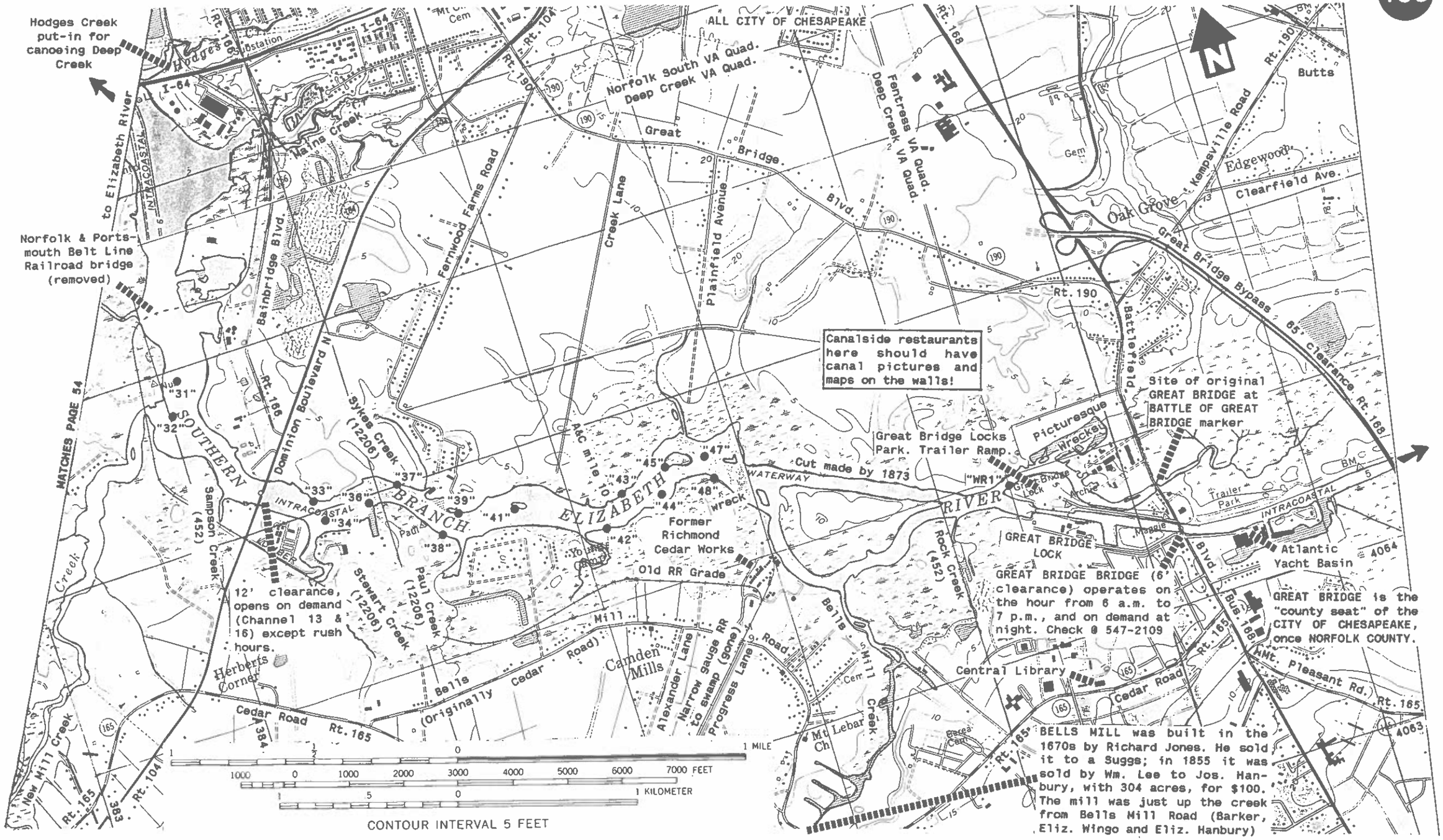
Visitors can see this lock in action from a grandstand erected by the City of Chesapeake. Note the RELICS OF THE REVOLUTION monument and the size of the spare lock gates on the bank nearby.

See "The Guard Lock at Great Bridge" by A.C. Brown, VIRGINIA CAVALCADE, Autumn 1974.

The 1775 patriot earthworks were about here, where the canal's drawbridge is now. The original drawbridge was the first one constructed by the canal company.

The 1781 British fort was about here. 44CS22

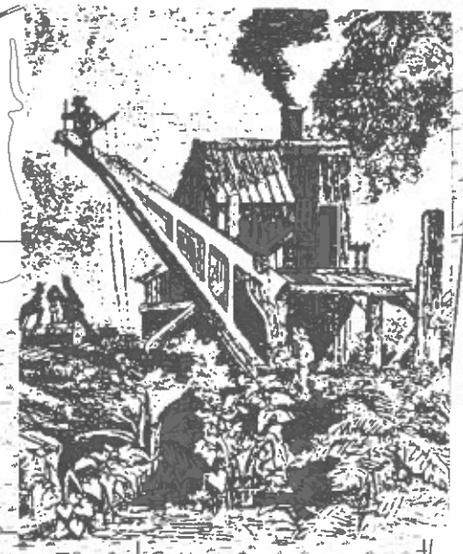
This map of Great Bridge Lock is from a 1946 map courtesy of the Corps of Engineers. The buildings along Battlefield Boulevard have changed much since then. Do any of these new restaurants and shops have historic pictures of Great Bridge, Great Bridge Lock, and the A&C Canal on the walls?


Hodges Creek put-in for canoeing Deep Creek
to Elizabeth River
INTRACOASTAL
Norfolk & Portsmouth Belt Line Railroad bridge (removed)
MATCHES PAGE 54
Hodges Creek
Substation
I-64
Rt. 165
Rt. 104
Rt. 190
Rt. 168
Rt. 186
Rt. 384
Rt. 165
Mt. Cem
Hains Creek
Bainbridge Blvd.
Dominion Boulevard N
Fernwood Farms Road
Creek Lane
Plainfield Avenue
Great Bridge Blvd.
ALL CITY OF CHESAPEAKE
Norfolk South VA Quad.
Deep Creek VA Quad.
Fentress VA Quad.
Deep Creek VA Quad.
Gem
Butts
Edgewood
Clearfield Ave.
Oak Grove
Kempsville Road
Great Bridge Bypass
65' clearance
Battlefield
Rt. 190
Canalside restaurants here should have canal pictures and maps on the walls!
Site of original GREAT BRIDGE at BATTLE OF GREAT BRIDGE marker
Great Bridge Locks Park. Trailer Ramp.
Picturesque Wrecker
Cut made by 1873
WATERWAY
"WR1"
Great Bridge Lock
Arch
Trailer Park
INTRACOASTAL
BM
5
SOUTHERN BRANCH ELIZABETH RIVER
Sykes Creek (12206)
Sampson Creek (452)
Stewart Creek (12206)
Paul Creek (12206)
Rock Creek (452)
A&C mile
"31"
"32"
"33"
"34"
"36"
"37"
"38"
"39"
"41"
"42"
"43"
"44"
"45"
"47"
"48"
wreck
Former Richmond Cedar Works
Old RR Grade
To Canal
Padl
SBR
12' clearance, opens on demand (Channel 13 & 16) except rush hours.
GREAT BRIDGE LOCK
GREAT BRIDGE BRIDGE (6' clearance) operates on the hour from 6 a.m. to 7 p.m., and on demand at night. Check @ 547-2109
Atlantic Yacht Basin
4064
GREAT BRIDGE is the "county seat" of the CITY OF CHESAPEAKE, once NORFOLK COUNTY.
Herberts Corner
Cedar Road
Rt. 165
(Originally Cedar Road)
Bells Mill Road
Camden Mills
Alexander Lane
Narrow gauge RR to swamp (gone)
Progress Lane
Mill Creek
Mt Lebar Ch
Cem
Central Library
Cedar Road
Rt. 165
Mt. Pleasant Rd.
4063
New Mill Creek
BELLS MILL was built in the 1670s by Richard Jones. He sold it to a Suggs; in 1855 it was sold by Wm. Lee to Jos. Hanbury, with 304 acres, for $100. The mill was just up the creek from Bells Mill Road (Barker, Eliz. Wingo and Eliz. Hanbury)
1 MILE
0
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
1 .5 0
CONTOUR INTERVAL 5 FEET

THE VIRGINIA CUT

ALL CITY OF CHESAPEAKE
- all Fentress VA Quad. -

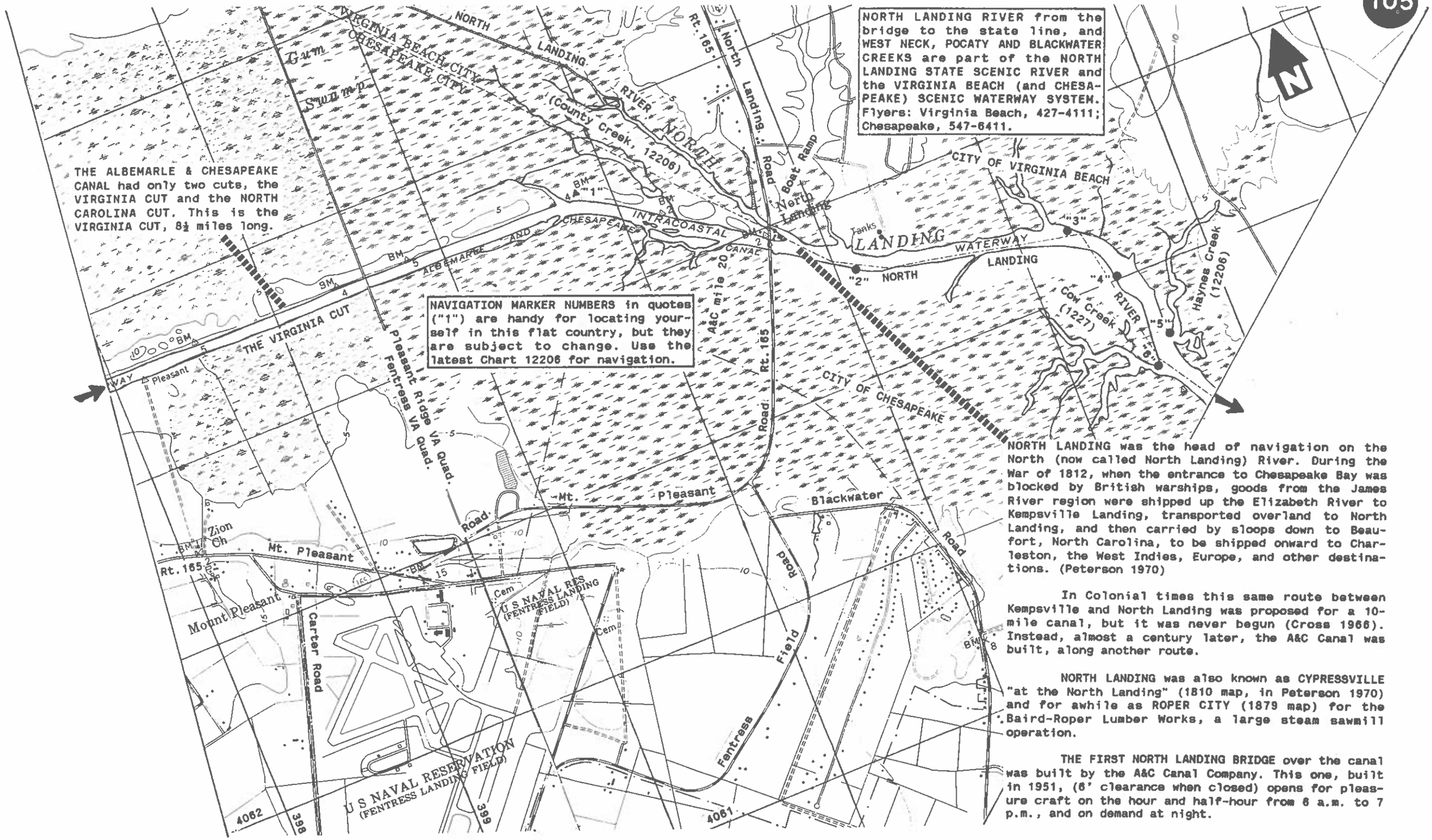
INCREDIBLE JOURNEY: To start digging the Virginia Cut in 1856, two giant steam dredges were towed over 180 miles from Norfolk into the ocean, down the coast to Pamlico Sound in North Carolina, and up sounds and back bays to North Landing - within 20 miles of the starting point! Two other dredges went with them and were dropped off to dig the North Carolina Cut.



THE ELIZABETH CITY & NORFOLK RAILROAD (now Norfolk Southern's Elizabeth City Line) originally crossed the canal in 1880 on a "floating drawbridge" on pontoons. To let boats pass the bridge was lifted off its abutments on the shore, and floated out of the way. It was replaced by a bascule (rolling lift) bridge in 1928. Today it is normally open; 7' clearance when closed.

THE CENTERVILLE TURNPIKE COMPANY built the first bridge here in 1878; the present one dates from 1955. It opens for pleasure craft on the hour and half-hour from 6 a.m. to 7 p.m., and on demand at night. 4' clearance when closed.

Butts Station
Butts Road
Elbow Road
Bethel Ch
Clearfield Ave.
Norfolk Southern
Centerville Turnpike
Boat Ramp
Centerville Waterway Marina
Marker C of E?
131-810
ALBEMARLE AND CHESAPEAKE CANAL
INTRACOASTAL WATERWAY
THE VIRGINIA CUT
A&C Canal, site #131-44
A&C mile 15
Great Bridge Bypass Rt. 168
Rt. 165
Mt. Pleasant
Southern Road
Mount Pleasant Sch
High Tension Line
Mt. Pleasant Road
Mount Pleasant Ch
Rt. 165
Schoolhouse Road
Fentress
4064
4063


NORTH LANDING RIVER from the bridge to the state line, and WEST NECK, POCATY AND BLACKWATER CREEKS are part of the NORTH LANDING STATE SCENIC RIVER and the VIRGINIA BEACH (and CHESAPEAKE) SCENIC WATERWAY SYSTEM. Flyers: Virginia Beach, 427-4111; Chesapeake, 547-6411.
THE ALBEMARLE & CHESAPEAKE CANAL had only two cuts, the VIRGINIA CUT and the NORTH CAROLINA CUT. This is the VIRGINIA CUT, 8¼ miles long.
NAVIGATION MARKER NUMBERS in quotes ("1") are handy for locating yourself in this flat country, but they are subject to change. Use the latest Chart 12206 for navigation.
VIRGINIA BEACH CITY
CHESAPEAKE CITY
Gum Swamp
NORTH LANDING RIVER
(County Creek, 12206)
Rt. 165
North Landing Road
Boat Ramp
North Landing
CITY OF VIRGINIA BEACH
Tanks
LANDING WATERWAY
"1"
"2"
"3"
"4"
"5"
"6"
INTRACOASTAL
ALBEMARLE AND CHESAPEAKE CANAL
A&C mile 20
THE VIRGINIA CUT
Pleasant
Fentress VA Quad.
Pleasant Ridge VA Quad.
CITY OF CHESAPEAKE
Cow Creek (1227)
Haynes Creek (12206)
Mt. Pleasant Road
Blackwater Road
Zion Ch
Mt. Pleasant
Rt. 165
Mount Pleasant
Carter Road
U S NAVAL RES (FENTRESS LANDING FIELD)
Cem
Fentress Field Road
U S NAVAL RESERVATION (FENTRESS LANDING FIELD)
4062
398
399
4061

NORTH LANDING was the head of navigation on the North (now called North Landing) River. During the War of 1812, when the entrance to Chesapeake Bay was blocked by British warships, goods from the James River region were shipped up the Elizabeth River to Kempsville Landing, transported overland to North Landing, and then carried by sloops down to Beaufort, North Carolina, to be shipped onward to Charleston, the West Indies, Europe, and other destinations. (Peterson 1970)

In Colonial times this same route between Kempsville and North Landing was proposed for a 10-mile canal, but it was never begun (Cross 1966). Instead, almost a century later, the A&C Canal was built, along another route.

NORTH LANDING was also known as CYPRESSVILLE "at the North Landing" (1810 map, in Peterson 1970) and for awhile as ROPER CITY (1879 map) for the Baird-Roper Lumber Works, a large steam sawmill operation.

THE FIRST NORTH LANDING BRIDGE over the canal was built by the A&C Canal Company. This one, built in 1951, (6' clearance when closed) opens for pleasure craft on the hour and half-hour from 6 a.m. to 7 p.m., and on demand at night.

LAND OF PROMISE

MATCHES PAGE 143

- all Pleasant Ridge VA Quad. -

"Starvation Farm" (1880 map)
"Here and there is seen a cleared spot, but the deserted dwelling upon it tells its tale only too well. There are a number of these 'starvation plantations' along North Landing River." S.W. Staunton, SEABOARD MAGAZINE, 1892 (O'Dell, 1988).

WEST NECK CREEK and NORTH LANDING RIVER are part of the NORTH LANDING STATE SCENIC RIVER and the VIRGINIA BEACH SCENIC WATERWAY SYSTEM. Flyer: 547-6411.

Etheridge's Wharf (1880 map)

THIS LOOP IN THE NORTH LANDING RIVER and those on the next page were known as DUTCH GAPS, after the famous Dutch Gap on the James River. Eventually, like the original Dutch Gap, a canal was dug straight across the bend to improve navigation. The resulting oxbows are now interesting graveyards of old wooden barges.

Observation Platform accessible by boat

POCATY CREEK (or River) from Blackwater Road to its mouth, is part of the NORTH LANDING STATE SCENIC RIVER, and the VIRGINIA BEACH SCENIC WATERWAY SYSTEM.

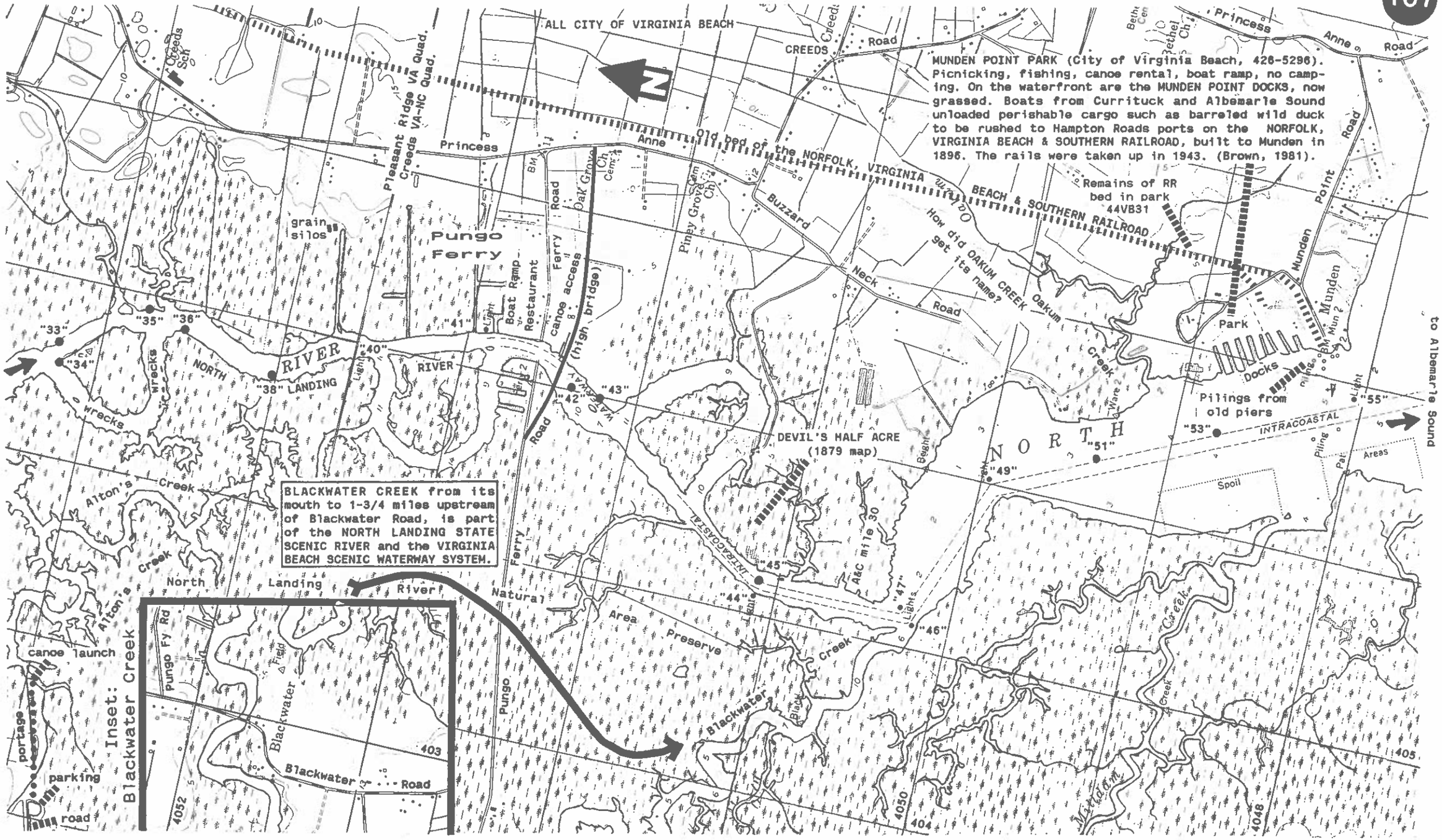
Inset: Pocaty Creek

OPPOSITE PAGE: The canoe launch on many-branched Alton's Creek in the NORTH LANDING RIVER NATURAL AREA PRESERVE is via a 0.4-mile portage from the parking area, but it's well worth it. Look for the entrance sign on Blackwater Road opposite the end of Old Carolina Road. Info: (757) 481-2131 or (804) 786-7951. (Info thanks to Thomas L. Smith, DCR Division of Natural Heritage)

1 ½ 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER

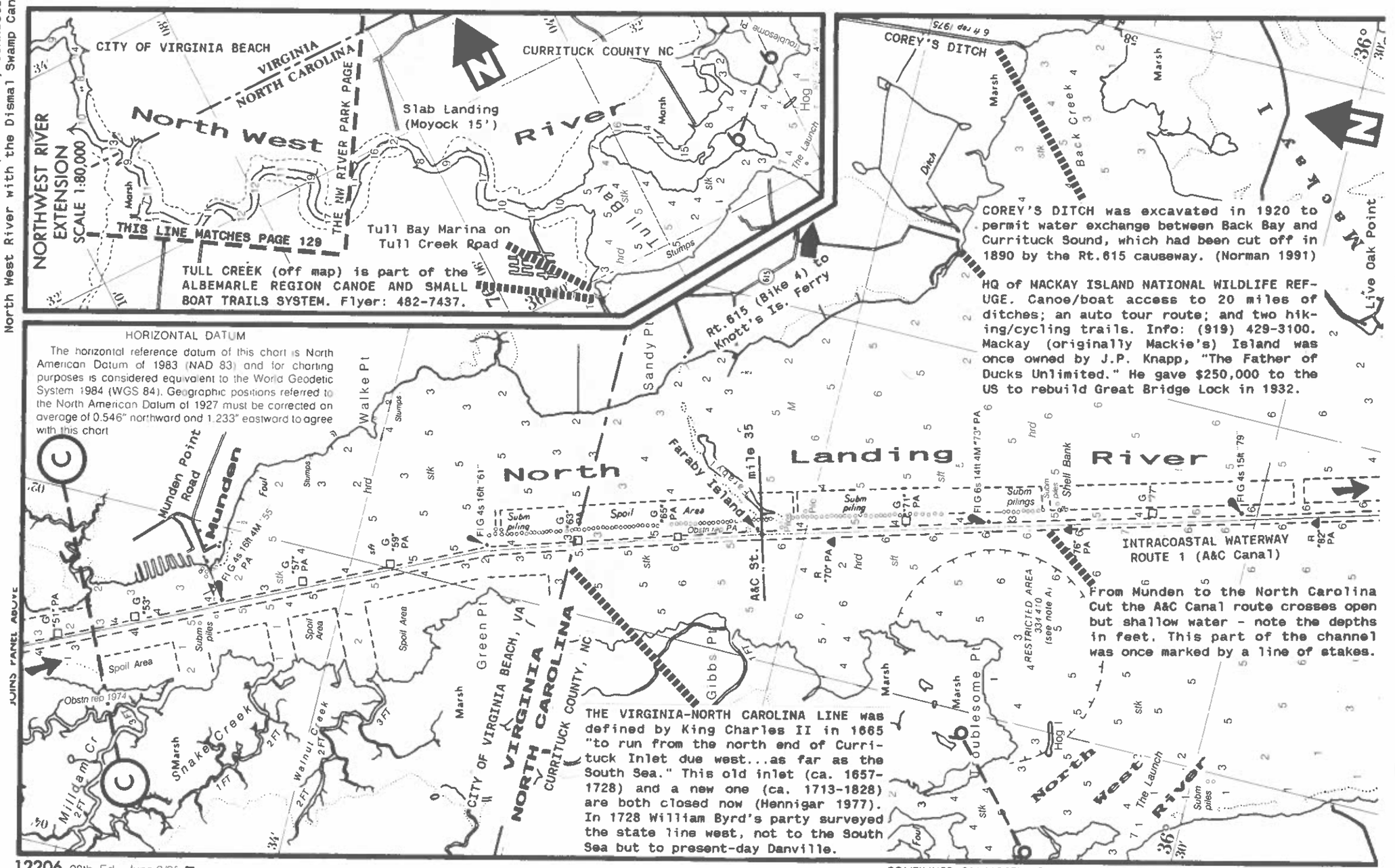
CONTOUR INTERVAL 5 FEET

MUNDEN POINT DOCKS


MUNDEN POINT PARK (City of Virginia Beach, 426-5296). Picnicking, fishing, canoe rental, boat ramp, no camping. On the waterfront are the MUNDEN POINT DOCKS, now grassed. Boats from Currituck and Albemarle Sound unloaded perishable cargo such as barreled wild duck to be rushed to Hampton Roads ports on the NORFOLK, VIRGINIA BEACH & SOUTHERN RAILROAD, built to Munden in 1896. The rails were taken up in 1943. (Brown, 1981).
BLACKWATER CREEK from its mouth to 1-3/4 miles upstream of Blackwater Road, is part of the NORTH LANDING STATE SCENIC RIVER and the VIRGINIA BEACH SCENIC WATERWAY SYSTEM.
Inset: Blackwater Creek
ALL CITY OF VIRGINIA BEACH
CREEDS
Princess Anne Road
Old bed of the NORFOLK, VIRGINIA BEACH & SOUTHERN RAILROAD
Remains of RR bed in park 44VB31
How did OAKUM CREEK get its name?
Pleasant Ridge VA Quad.
Creeds VA-NC Quad.
Pungo Ferry
grain silos
Boat Ramp - Restaurant
Ferry Road
canoe access
(high bridge)
Oak Grove Ch.
Pinky Grove Cem.
Buzzard Neck Road
Munden Point Road
Munden Park
Docks
Pilings from old piers
NORTH RIVER
"38" LANDING
wrecks
Alton's Creek
DEVIL'S HALF ACRE (1879 map)
INTRACOASTAL
A&C mile 30
Natural Area Preserve
Pungo Ferry Rd
Blackwater Road
canoe launch
portage
parking
road
to Albemarle Sound

THE NORTH WEST CANAL (see PART 4) connected North West River with the Dismal Swamp Canal.

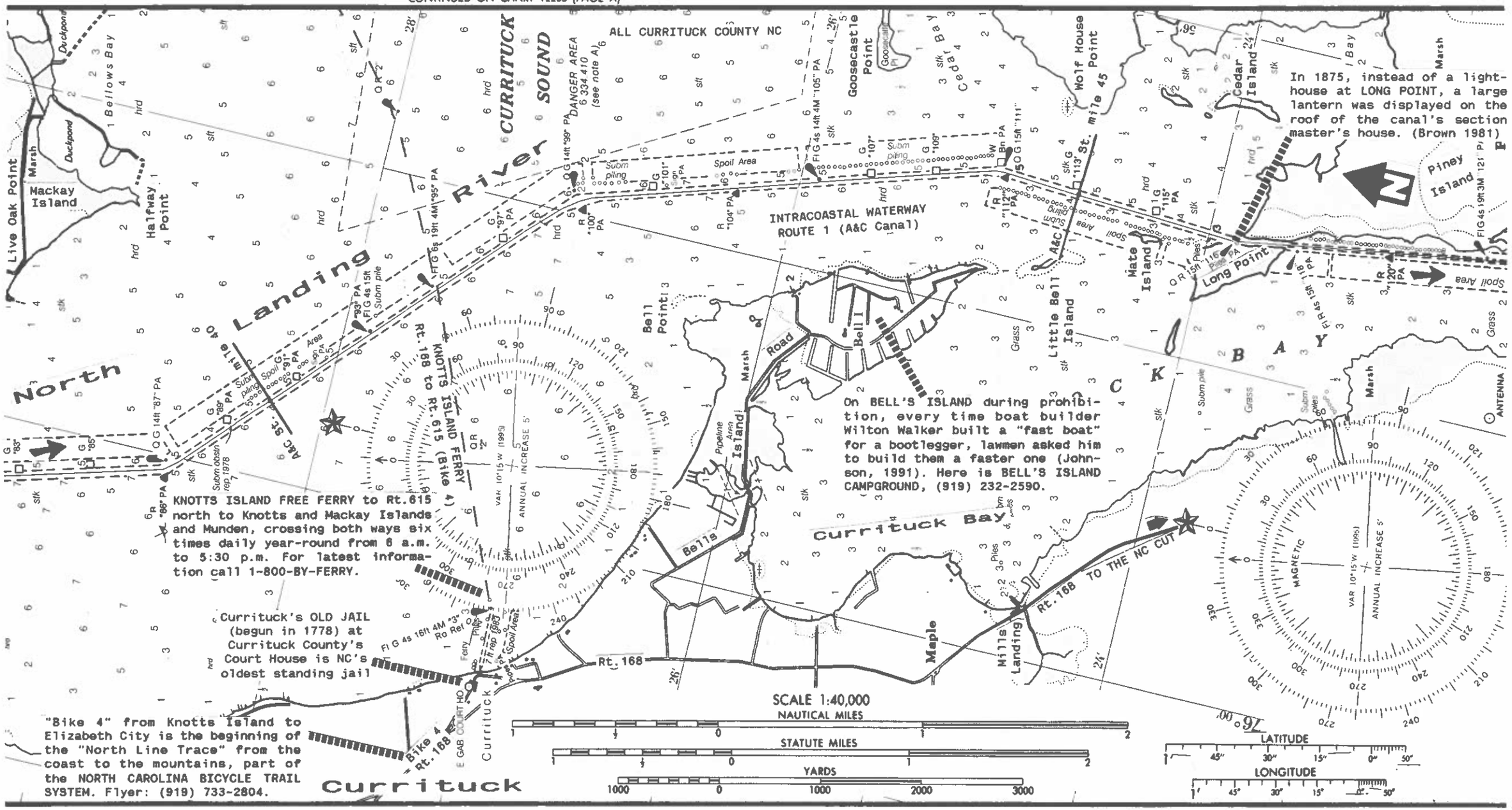
From Nautical Chart 12206, June 1995 Edition


CITY OF VIRGINIA BEACH
VIRGINIA
NORTH CAROLINA
CURRITUCK COUNTY NC
NORTHWEST RIVER EXTENSION
SCALE 1:80,000
THIS LINE MATCHES PAGE 129
THE NW RIVER PARK PAGE
North West River
Slab Landing (Moyock 15')
Tull Bay Marina on Tull Creek Road
TULL CREEK (off map) is part of the ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM. Flyer: 482-7437.
COREY'S DITCH
Back Creek
Currituck Sound
Live Oak Point
COREY'S DITCH was excavated in 1920 to permit water exchange between Back Bay and Currituck Sound, which had been cut off in 1890 by the Rt.615 causeway. (Norman 1991)
HQ of MACKAY ISLAND NATIONAL WILDLIFE REFUGE. Canoe/boat access to 20 miles of ditches; an auto tour route; and two hiking/cycling trails. Info: (919) 429-3100. Mackay (originally Mackie's) Island was once owned by J.P. Knapp, "The Father of Ducks Unlimited." He gave $250,000 to the US to rebuild Great Bridge Lock in 1932.
Rt.615 (Bike 4) to Knott's Is. Ferry
HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) and for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.546" northward and 1.233" eastward to agree with this chart
Munden Point Road
Munden
Walke Pt
Sandy Pt
Faraby Island
mile 35
North Landing River
Shell Bank
INTRACOASTAL WATERWAY ROUTE 1 (A&C Canal)
A&C St.
From Munden to the North Carolina Cut the A&C Canal route crosses open but shallow water - note the depths in feet. This part of the channel was once marked by a line of stakes.
Green Pt
Gibbs Pt
CITY OF VIRGINIA BEACH, VA
VIRGINIA
NORTH CAROLINA
CURRITUCK COUNTY, NC
THE VIRGINIA-NORTH CAROLINA LINE was defined by King Charles II in 1665 "to run from the north end of Currituck Inlet due west...as far as the South Sea." This old inlet (ca. 1657-1728) and a new one (ca. 1713-1828) are both closed now (Hennigar 1977). In 1728 William Byrd's party surveyed the state line west, not to the South Sea but to present-day Danville.
Sublesome Pt
Hog I
North West River
Milldam Cr
Snake Creek
Walnut Creek
Obstn rep 1974
Spoil Area
Marsh
Stumps
Subm piles
Subm pilings
RESTRICTED AREA
JOINS PANEL ABOVE

CONTINUED ON NORTHWEST RIVER EXTENSION

From Nautical Chart 12206, June 1995 Edition

CONTINUED ON CHART 12205 (PAGE A)



In 1875, instead of a lighthouse at LONG POINT, a large lantern was displayed on the roof of the canal's section master's house. (Brown 1981)

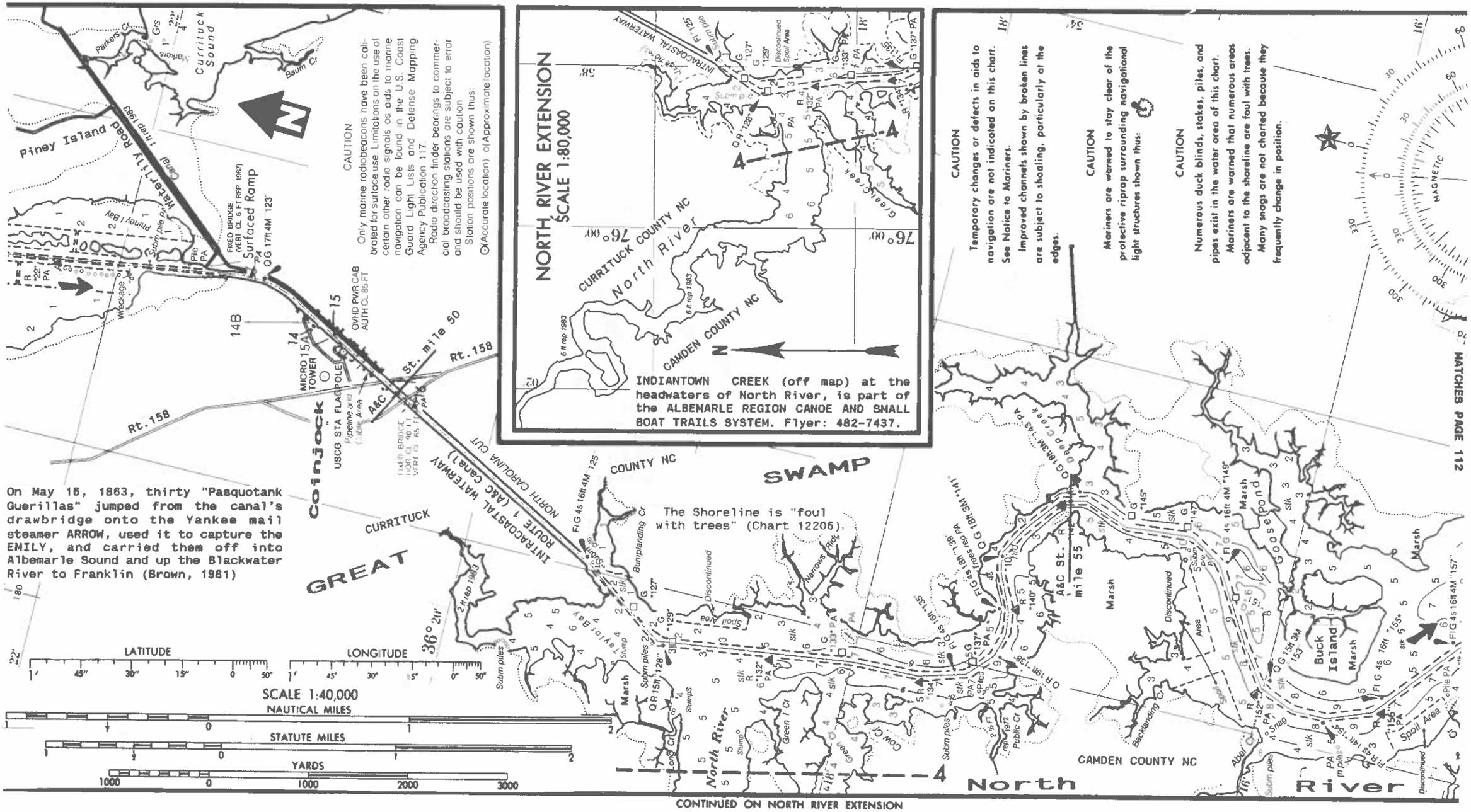
On BELL'S ISLAND during prohibition, every time boat builder Wilton Walker built a "fast boat" for a bootlegger, lawmen asked him to build them a faster one (Johnson, 1991). Here is BELL'S ISLAND CAMPGROUND, (919) 232-2590.

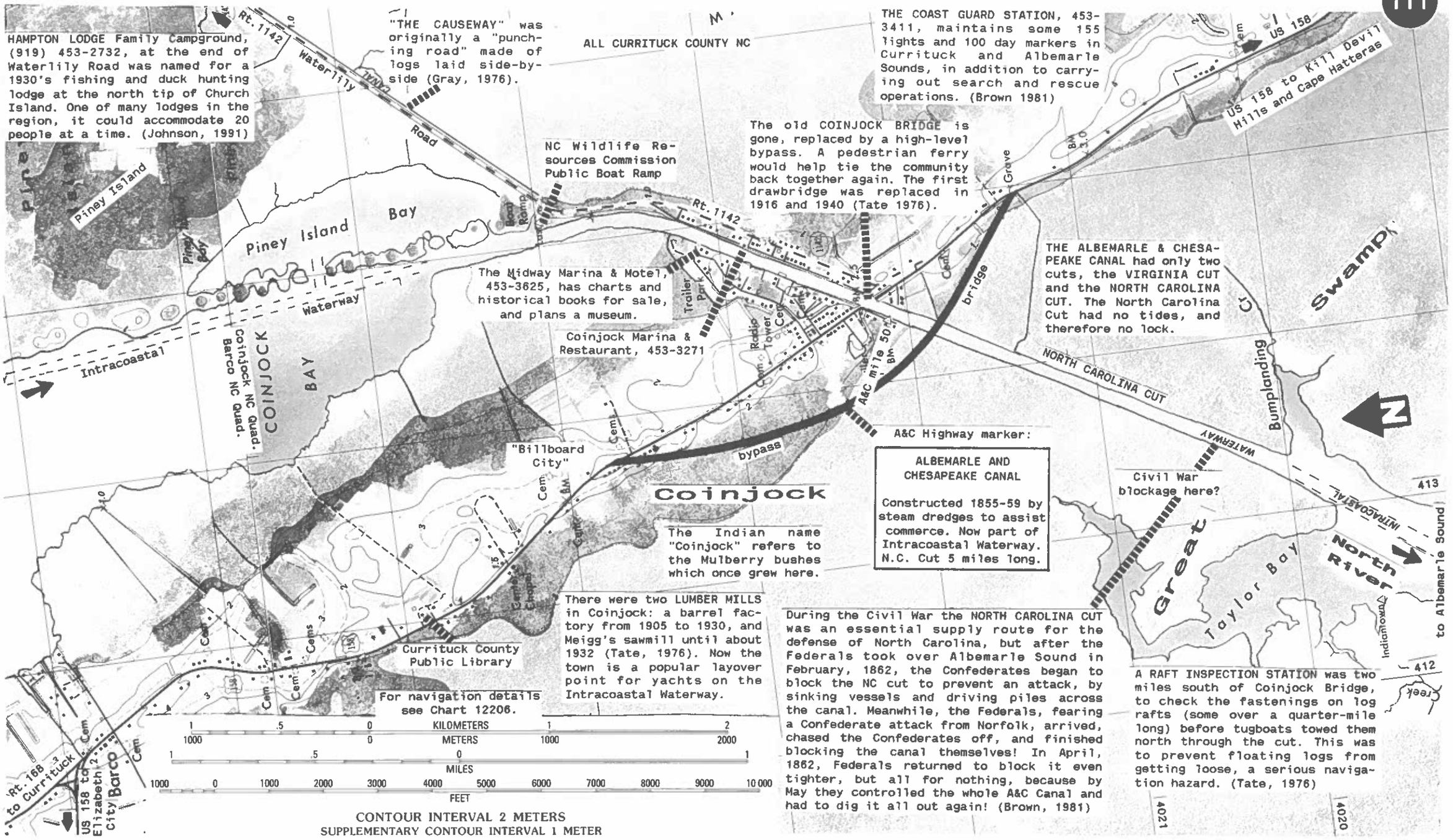
KNOTTS ISLAND FREE FERRY to Rt.615 north to Knotts and Mackay Islands and Munden, crossing both ways six times daily year-round from 6 a.m. to 5:30 p.m. For latest information call 1-800-BY-FERRY.

Currituck's OLD JAIL (begun in 1778) at Currituck County's Court House is NC's oldest standing jail

"Bike 4" from Knotts Island to Elizabeth City is the beginning of the "North Line Trace" from the coast to the mountains, part of the NORTH CAROLINA BICYCLE TRAIL SYSTEM. Flyer: (919) 733-2804.

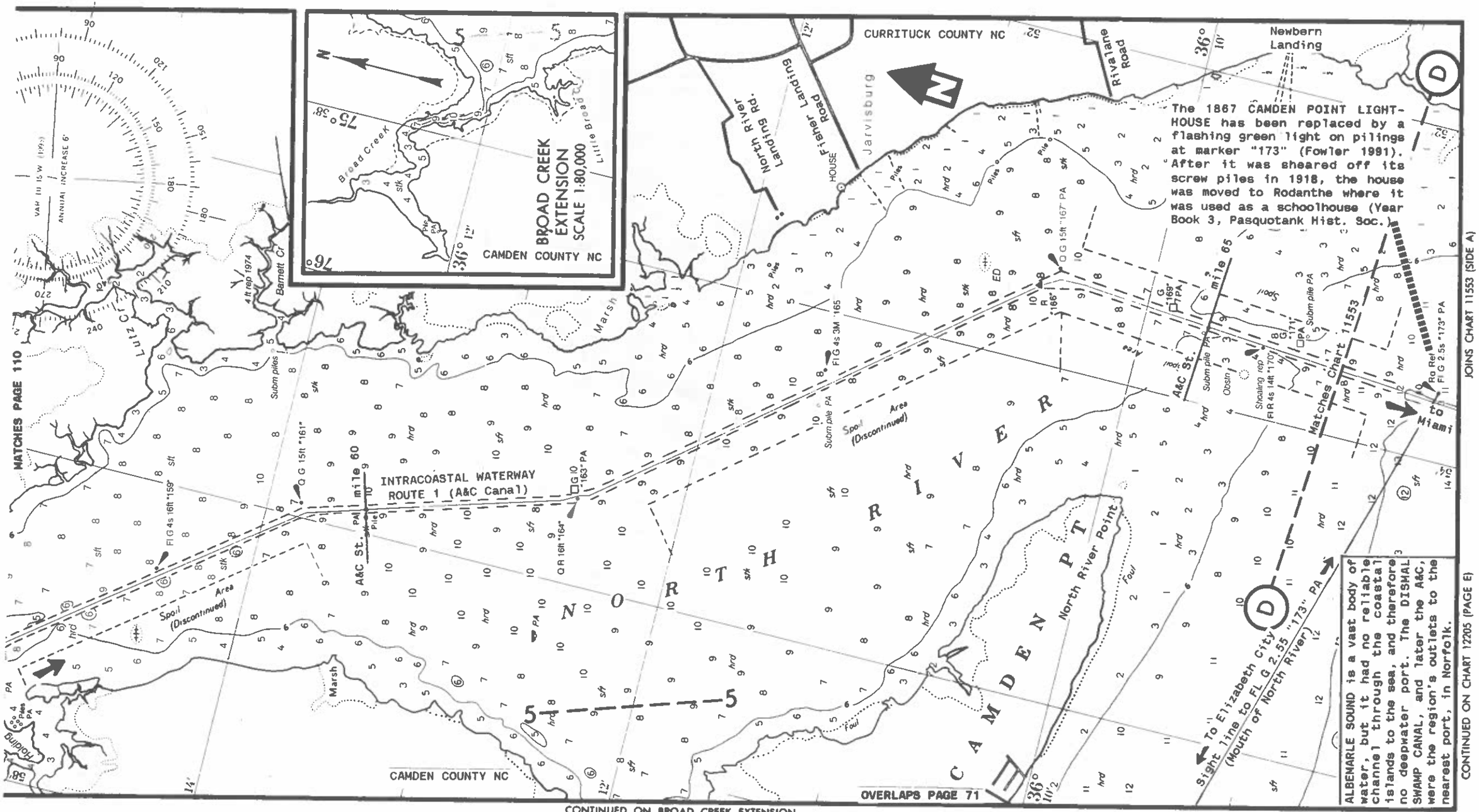
From Nautical Chart 12206, June 1995 Edition


NORTH RIVER EXTENSION
SCALE 1:80,000
INDIANTOWN CREEK (off map) at the headwaters of North River, is part of the ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM. Flyer: 482-7437.
CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping Agency Publication 117.
Radio direction finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus: ⊙(Accurate location) ⊙(Approximate location)
CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.
CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:
CAUTION
Numerous duck blinds, stakes, piles, and pipes exist in the water area of this chart. Mariners are warned that numerous areas adjacent to the shoreline are foul with trees. Many snags are not charted because they frequently change in position.
MATCHES PAGE 112
On May 16, 1863, thirty "Pasquotank Guerillas" jumped from the canal's drawbridge onto the Yankee mail steamer ARROW, used it to capture the EMILY, and carried them off into Albemarle Sound and up the Blackwater River to Franklin (Brown, 1981)
The Shoreline is "foul with trees" (Chart 12206).
Piney Island Road 1983
Waterfall Canal
Currituck Sound
Parkers Cr
Baum Cr
Piney Island Bay
Wreckage
Subm pipe PA
Pile PA
FIXED BRIDGE (VERT CL 6 FT REP 1967) Surfaced Ramp QG 17ft 4M 123
OVHD PWR CAB AUTH CL 85 FT
MICRO TOWER
FLAGPOLE
USCG STA
Coinjock
St. mile 50
Rt. 158
A&C
INTRACOASTAL WATERWAY
NORTH CAROLINA CUT
ROUTE 1 (A&C Canal)
CURRITUCK
GREAT
SWAMP
COUNTY NC
Bumplanding Cr
Narrows Pkdy
Taylor Bay
Long Cr
Green Cr
Cow Cr
Public Cr
Backlanding Cr
Deep Creek
Goose Pond
Buck Island
Marsh
Spoil Area
Discontinued
Stumps
Subm piles
Stk
Snag
QR 15ft
QG 18ft 3M "139"
FIG 4s 16ft 4M "149"
FIG 4s 16ft 4M "157"
QG 15ft 3M "153"
A&C St. mile 55
North River
CAMDEN COUNTY NC
LATITUDE
LONGITUDE
SCALE 1:40,000
NAUTICAL MILES
STATUTE MILES
YARDS
MAGNETIC
CONTINUED ON NORTH RIVER EXTENSION

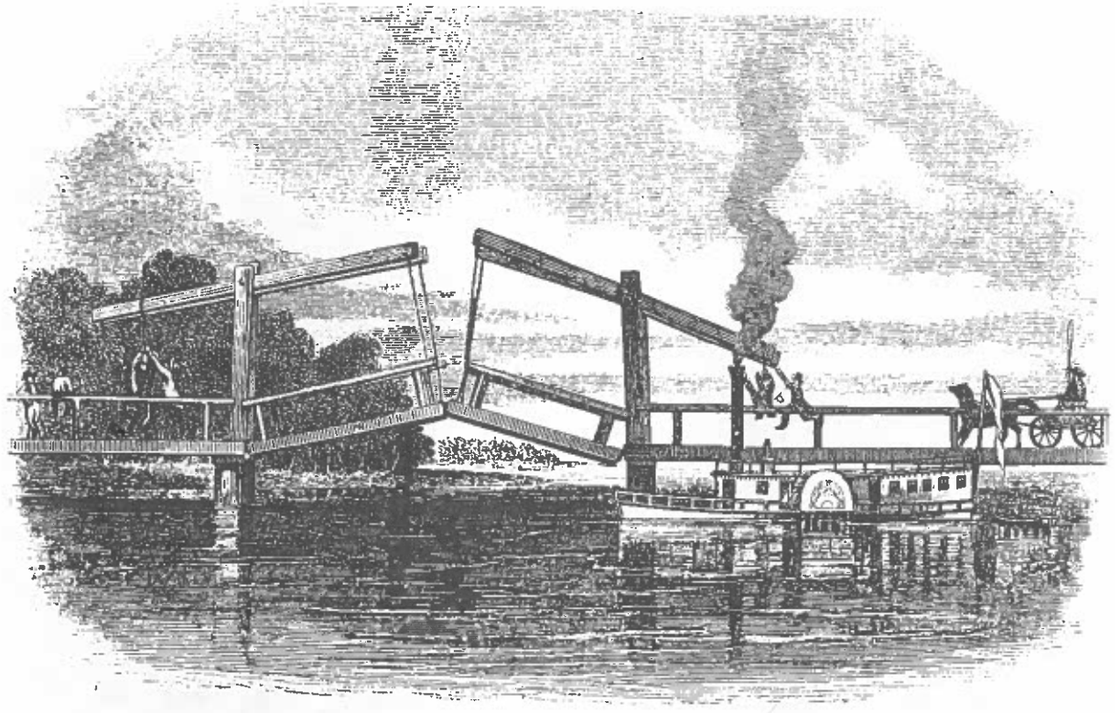

HAMPTON LODGE Family Campground, (919) 453-2732, at the end of Waterlily Road was named for a 1930's fishing and duck hunting lodge at the north tip of Church Island. One of many lodges in the region, it could accommodate 20 people at a time. (Johnson, 1991)
"THE CAUSEWAY" was originally a "punching road" made of logs laid side-by-side (Gray, 1976).
ALL CURRITUCK COUNTY NC
THE COAST GUARD STATION, 453-3411, maintains some 155 lights and 100 day markers in Currituck and Albemarle Sounds, in addition to carrying out search and rescue operations. (Brown 1981)
US 158 to Kill Devil Hills and Cape Hatteras
Rt. 1142
Waterlily Road
Piney Island
Piney Island Bay
Pine Island
Pine Island Bay
NC Wildlife Resources Commission Public Boat Ramp
The old COINJOCK BRIDGE is gone, replaced by a high-level bypass. A pedestrian ferry would help tie the community back together again. The first drawbridge was replaced in 1916 and 1940 (Tate 1976).
Grave
Rt. 1142
The Midway Marina & Motel, 453-3625, has charts and historical books for sale, and plans a museum.
Trailer Park
Coinjock Marina & Restaurant, 453-3271
Radio Tower
Cem.
Creek
Canal bridge
THE ALBEMARLE & CHESAPEAKE CANAL had only two cuts, the VIRGINIA CUT and the NORTH CAROLINA CUT. The North Carolina Cut had no tides, and therefore no lock.
Intracoastal Waterway
Coinjock NC Quad.
Barco NC Quad.
COINJOCK BAY
A&C mile 50
NORTH CAROLINA CUT
Swamp
Cut
Bumplanding
WATERWAY
INTRACOASTAL
"Billboard City"
bypass
A&C Highway marker:
ALBEMARLE AND CHESAPEAKE CANAL
Constructed 1855-59 by steam dredges to assist commerce. Now part of Intracoastal Waterway. N.C. Cut 5 miles long.
Civil War blockage here?
Coinjock
The Indian name "Coinjock" refers to the Mulberry bushes which once grew here.
There were two LUMBER MILLS in Coinjock: a barrel factory from 1905 to 1930, and Meigg's sawmill until about 1932 (Tate, 1976). Now the town is a popular layover point for yachts on the Intracoastal Waterway.
During the Civil War the NORTH CAROLINA CUT was an essential supply route for the defense of North Carolina, but after the Federals took over Albemarle Sound in February, 1862, the Confederates began to block the NC cut to prevent an attack, by sinking vessels and driving piles across the canal. Meanwhile, the Federals, fearing a Confederate attack from Norfolk, arrived, chased the Confederates off, and finished blocking the canal themselves! In April, 1862, Federals returned to block it even tighter, but all for nothing, because by May they controlled the whole A&C Canal and had to dig it all out again! (Brown, 1981)
Currituck County Public Library
For navigation details see Chart 12206.
Great Taylor Bay
North River
to Albemarle Sound
Indiantown
413
412
A RAFT INSPECTION STATION was two miles south of Coinjock Bridge, to check the fastenings on log rafts (some over a quarter-mile long) before tugboats towed them north through the cut. This was to prevent floating logs from getting loose, a serious navigation hazard. (Tate, 1976)
Rt. 168 to Currituck
US 158 to Elizabeth City
Barco
KILOMETERS
METERS
MILES
FEET
CONTOUR INTERVAL 2 METERS
SUPPLEMENTARY CONTOUR INTERVAL 1 METER
4021
4020

112 MOUTH OF NORTH RIVER

From Nautical Chart 12206, June 1995 Edition


BROAD CREEK EXTENSION SCALE 1:80,000
CAMDEN COUNTY NC
CURRITUCK COUNTY NC
Newbern Landing
Rivalane Road
North River Landing Rd.
Fisher Landing
HOUSE
Jarvisburg
The 1867 CAMDEN POINT LIGHTHOUSE has been replaced by a flashing green light on pilings at marker "173" (Fowler 1991). After it was sheared off its screw piles in 1918, the house was moved to Rodanthe where it was used as a schoolhouse (Year Book 3, Pasquotank Hist. Soc.)
Luzz Cr
Barnett Cr
Broad Creek
Little Broad Cr
Marsh
INTRACOASTAL WATERWAY
ROUTE 1 (A&C Canal)
A&C St.
mile 60
mile 65
Spoil Area (Discontinued)
Subm pile PA
Matches Chart 11553
to Miami
NORTH RIVER
CAMDEN PT
North River Point
To Elizabeth City
Sight line to Fl G 2.55 "173" PA
(Mouth of North River)
ALBEMARLE SOUND is a vast body of water, but it had no reliable channel through the coastal islands to the sea, and therefore no deepwater port. The DISMAL SWAMP CANAL, and later the A&C, were the region's outlets to the nearest port, in Norfolk.
MATCHES PAGE 110
JOINS CHART 11553 (SIDE A)
CONTINUED ON CHART 12205 (PAGE E)
CONTINUED ON BROAD CREEK EXTENSION
OVERLAPS PAGE 71
CAMDEN COUNTY NC
Fl G 4s 16ft "159"
Q G 15ft "161"
Fl G 4s 3M 165
Q G 15ft "167" PA
Fl R 4s 14ft "170"
Fl G 2.5s "173" PA
Ra Refl
Obstn
Shoaling rep
Holding

I think it was in the summer of 1890 that Dr. J. C. Reed and I had the pleasure of a memorable trip through the Albemarle & Chesapeake Canal, (an inland waterway connecting the Southern branch of Elizabeth river with the North river,) on board the side wheel steamer "Bonito." This majestic craft was used for the transportation of passengers and freight from Norfolk to the landings on Currituck Sound as far south as "Church Branch" in North Carolina. The route lay up the Southern branch of the Elizabeth river, thence through the above mentioned canal to the head of North river, thence down that narrow but deep stream out into Currituck Sound, touching at North Landing, West's Neck, Munden Point, Knott's Island, and so on till night overtook the boat, then she spent the night and made the trip back to Norfolk next day, if the Captain and crew felt like doing so. Dr. Reed was on his way to the Quarterly Conference of the South Princess Anne circuit to be held at Wash Woods chapel, on the beach opposite Knott's Island. I was on my way to join my family, spending the month at No. 6 Life Saving Station, on the invitation of the big-hearted and big-bodied Captain, Malichi Corbell. We ate a hearty breakfast in Portsmouth early that morning, and such forethought was vindicated by the experience of the day. When midday arrived we were still going down the zigzag current of the North river. Very unexpectedly dinner was announced. We had seen no signs of the approaching feast. We did not know there was a dining-room on the boat. Certainly the dinner would not be served in the saloon, for that was not large enough for more than five passengers to move about in unless the big, fat female cook stayed out. We followed our guide, and she led us forward of the cook-room to a room, large enough for two men the size of Dr. Reed and me to enter carefully and sit perfectly still; and there she served our dinner spread out upon a table adjusted to the side of the wall. We had coffee which had seen its best days when quietly sleeping in a bag somewhere. Then we had stewed beef served in what seemed to be the



steamer's wash bowl. We were mistaken about this, for, upon inquiry, we learned that the steamer had no wash bowl! that if any of the passengers desired a bath before eating, a rope was attached to the aforesaid passenger's waist, and, while the other end was held in the strong grip of a dusky deck-hand, the unclean traveller would hang overboard, and bathe himself freely in the cypress stained waters of the placid stream. This information brought us peace of mind for we had long ago decided, that, in view of our surroundings, it would be entirely needless to bathe.

Dr. Reed and I pitched into the stewed beef, but accomplished very little. It was too tough a subject for discussion, therefore we tackled the stew in which the beef was stewed, but that was too thin; so we gave up that, and tried the coffee; but we could easily see through that piece of deception. We paid our quarter for the dinner, complimented the flavor of the pepper and salt, and went out on deck for fresh air. Luckily for us, there were two watermelons exposed to view. We bought one, cut it in half, and settled down to business. The sun went down as we turned eastward into the channel which carried our **tub** to the wharf at Knott's Island, and we landed at dark. A boat awaited us, and we were at the Life Saving Station within an hour and a half.

Next morning was Saturday. I awoke with a raging headache, and about the worst attack of indigestion a poor preacher ever had. My digestive machinery got on a rampage, because I had sent a few pieces of that beef down there to be ground up. Every part of that machine went on a strike. The dust kicked up by the row inside of me sent the fumes of failure up into my brain, turned me giddy as the dancer of the fox trot, and it was thirty-six hours before I could open my eyes and look up at the ceiling without the sensation of feeling that the house would topple over.

This A&C Canal adventure was discovered in FROM SADDLE TO CITY BY BUGGY, BOAT AND RAILWAY, written by The Rev. D. Gregory Claiborne Butts of the Virginia Conference, Methodist Espiscopal Church, South. [Hilton Village, Va., 1922], pp. 228- 231. (VC&NS archives)

The illustration is not of the BONITO, but of the CALYPSO, an even smaller sidewheeler on the A&C Canal with a similar adventure story set in 1859. At Pungo Bridge the "entire ship's company" took an hour to open the drawbridge just wide enough for the CALYPSO's smokestack, by hanging from the balance beams. The old Pungo Bridge is long gone but voyagers on canals in England can still experience the joy of opening bridges like this. From "Lounging in the Footprints of the Pioneers" in the May 1859 HARPER'S NEW MONTHLY MAGAZINE, p.755 (Duke University Library). For more about the BONITO and CALYPSO see Brown's A&C book.

The Albemarle & Chesapeake Canal: The Waterway Dredged by "Iron Titans"

*Still very much alive today as part of the Atlantic Intracoastal Waterway, the Albemarle and Chesapeake is a modern sea-level ship canal, designed for self-propelled coastal shipping and tows, built not by hand but by powerful steam dredges. It may even lay claim to being "the first of the world's modern sea-level ship canals" because it was completed in 1859, predating the modern Suez (1869), the Corinth (1893) the Cape Cod Canal (1914), and the Chesapeake and Delaware - which was in 1829 a lock canal, not cut to sea level until the 1920's.

Colonial Plans for the A&C

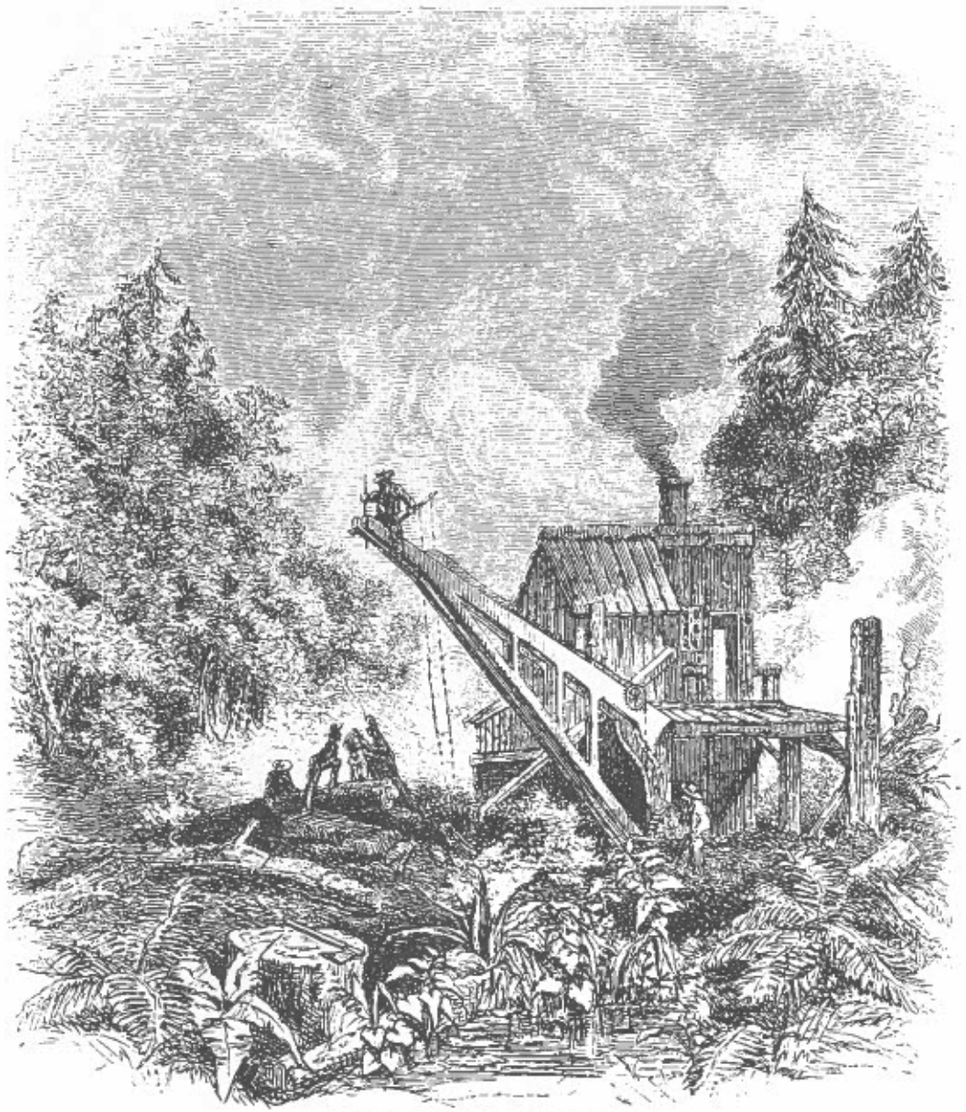
In common with these other canals, the A&C was built many decades after it had been first proposed. William Byrd II is credited with the original idea of a canal through the Dismal Swamp region in 1728, and the Albemarle and Chesapeake Canal route was even authorized in Colonial times by the Virginia House of Burgesses in 1772, during a period of intense interest in internal improvements. The object was to create a safe inland water route between Albemarle Sound and the Chesapeake Bay, by connecting Norfolk's Elizabeth River with the North Landing River and the coastal backwaters leading down into North Carolina. Two routes were surveyed, one via the Eastern Branch of Elizabeth River through Kempsville, and the other via the Southern Branch through Great Bridge; the latter, which the canal was eventually to take, was found to be shortest and least expensive.[1]

Unfortunately for the canal, this enthusiasm for internal improvements came at the same time as enthusiasm for independence from Britain, so the Revolution prevented further action until 1783 when the Virginia General Assembly once again authorized its construction. However, before anything was done the Dismal Swamp Canal was also authorized, and with the beginning of that canal's construction in 1793 there was no point in beginning another canal which would duplicate its function while having the disadvantage of being closer to hostile warships cruising along the Atlantic coast.

---

* This chapter is based almost entirely on Alexander Crosby Brown's thorough coverage in Juniper Waterway: A History of the Albemarle and Chesapeake Canal, published in 1981 by the University Press of Virginia for the Mariners Museum and the Norfolk County Historical Society of Chesapeake. This section is of necessity only a brief summary of his 255-page book, which readers are urged to obtain for a more detailed, illustrated and exciting account.

1. For more on the A&C Canal's origins in Colonial times see Charles B. Cross Jr., "The Canal," An Historical Review, pp. 11-19, Norfolk County Historical Society of Chesapeake, 1966.



ALBEMARLE AND CHESAPEAKE CANAL.

"The great dredges, brandishing their black arms among the fallen Titans of the wood, and dragging up the remains of long departed vegetable giants, saluting the while, as if in derision, the surviving patriarchs with rapid puffs of steam, contributed more than anything else to give life to the scene. More efficient and powerful pioneers never invaded the virgin wilderness. They work in pairs, one machine a little in advance of its mate. Each cuts a path forty feet wide and eight feet deep, piling up the black chaos of mud and stumps on either hand in long ramparts. Altogether, there are nine at work on the line."

Sketch and quotation from "Lounging in the Footprints of the Pioneers," by Edward C. Bruce in the May 1859 HARPER'S NEW MONTHLY MAGAZINE (Duke University Library).

Marshall Parks, Jr. and the Albemarle & Chesapeake Canal Company

However, it soon became clear that the Dismal Swamp Canal was a more difficult project than had first been envisioned. It would take a long time to complete, it would require a number of locks, it would be especially subject to droughts, and (as the industrial revolution progressed) it would be too small to accommodate the coastal vessels which needed to use it. Therefore, another act in 1809 incorporated "the Great Coastwise Canal and River Navigation Company," and (after an interruption by the War of 1812) another act in 1819 created the "Great Bridge Canal Company." But nothing was actually begun until the "Albemarle & Chesapeake Canal Company" was founded by Marshall Parks, Jr., the son of the Superintendent and Chief Engineer of the Dismal Swamp Canal Company.

Because the A&C Canal was obviously a competitor of the Dismal Swamp Canal, Parks had to obtain legislative approval in a roundabout way. He tactfully took advantage of two existing acts, which taken together would accomplish the purpose. A Virginia act of 1850 incorporating the Great Bridge Lumber and Canal Company had the authority to build the Virginia Cut of the canal, from Great Bridge to North Landing River; and a North Carolina act of the same year incorporating the Albemarle and Currituck Canal Company had the authority to build the North Carolina Cut, at Coinjock. These two cuts, the Virginia Cut 9 miles long, and the North Carolina Cut 5½ miles long, would link together the waters of Elizabeth River, Currituck Sound and Albemarle Sound to form a continuous 70-mile waterway. Finally, a North Carolina act in 1854-55, and a Virginia act in 1856 brought the two companies together to form the Albemarle and Chesapeake Canal Company with Parks as president, a post he was to hold for the next 29 years.[2]

The "Iron Titans": Monster Steam Dredges Build a Modern Waterway

Now, after half a century of planning, work finally began in 1855, even before the final company was organized. Parks took advantage of the latest engineering technology, employing a flotilla of steam dredges to cut through the low, swampy land packed with roots and logs. By February 1856, the first of the steam dredges had begun work; by May there were seven of these, and two more arrived over the next year. Four of the dredges were towed from Norfolk into the Atlantic Ocean and down the coast into Albemarle Sound, so that two could be dropped off to start the North Carolina Cut at Coinjock, and the other two could start the Virginia Cut from the North Landing end. The other three dredges were towed from Norfolk up the Southern Branch of the Elizabeth River so that two could begin the Virginia Cut from the Great Bridge end, and one could start clearing the site for the Great Bridge Lock. The last two, larger, dredges were moved (probably along a pilot canal) to the middle of the Virginia Cut, so they could start dredging outwards toward each end.

The great work, under Chief Engineer John Lathrop, was well publicized in the media of the time. Edmund Ruffin, in his 1861 book on North Carolina has provided us with a vivid description of the steam dredges at work:[3]

> The dredging apparatus is in a vessel of fifty or sixty feet long, and is worked by a sixteen horse power steam-engine. There are seven of these dredging machines and vessels in the different places, and there will be built two more of greater size and power. The excavation was begun at the edge of deep water, as enough water to float the vessel is necessary for the operation. Thence, the machines carried on the excavation regularly, to the full depth and width required for the early navigation. Two machines, one working a little ahead of the other, carry the full width of the canal. After finishing at one position, the vessel is moved forward, the head of the vessel facing the earth to be cut away, and there it is fastened to the bottom securely, by convenient appliances. An enormous beam with an iron scoop, or box, at the extremity, is thrust forward and dipped into the water just ahead of the vessel, and then drawn upward against the face of the bank to be cut away. If it be of any ordinary earth, hard or soft, the cutting edge of the scoop goes in easily and the box rises filled with its load of earth, which is forty cubic feet, the measure of the capacity of the box. The beam slowly swung around (on the crane principle), the bottom of the box is left open and the earth falls out on the bank on one side. When the digging is easy, the scoop may be dropped and lifted and will cut out and dispose of its forty cubic feet of earth, once in every minute. But while the operation, as I saw it, was very much slower, its effect was even more remarkable and surprising in reference to the difficulties. The obstacles could delay, but could not prevent the effectual operation of the machine. The living roots of great size were gradually loosened and finally torn out. The stumps are undermined by the scoop cutting beneath the main roots and then lifted up. However such obstructions may retard the progress of the work, nothing can effectually resist or defeat the monster ditcher. The thrusting out of the beam, its sundry changes of position suited to every required effort, the seizing and tearing up of the roots and earth, and finally the slow stretching out of the enormous arm and emptying of its hand - all moved by the unseen power of steam - made the whole operation seem as if it was the manual labor of a thinking being of colossal size of inconceivable physical power.

The World's First Reversible-Head Lock

Although the Albemarle & Chesapeake was from the beginning a sea-level canal, it required a tide lock at Great Bridge to take care of strong currents through the Virginia Cut. Here the effect of lunar tides in the Elizabeth River was as much as two feet above and below mean sea level. In addition, shallow Currituck Sound, backing up into the canal, could also change its level up or down, depending on the direction of the wind. This combination of wind and tide could result in hazardous currents flowing in either direction through the Virginia Cut. Therefore the tide lock at Great Bridge is a "reversible head" lock which can face in either direction, holding back a head of water up to eight feet. According to the A&C Canal Company the original lock was the world's first reversible head lock.[4]

The lock gates at Great Bridge were huge timber miter gates 25 feet long, each pushed open and pulled closed by a long timber moved by a cable and winch; there were no balance beams. To face in either direction, there were (and still are) two pairs of gates at each end of the lock, one pair facing east and one west - a total of four pairs of gates. In operation, two pairs of gates are used as in any ordinary lock, the other two pairs being folded back out of the way. The lock walls at that time were of cut granite blocks shipped down Chesapeake Bay from Port Deposit, Maryland, on the Susquehanna River.

Great Bridge Lock, as befits a true ship canal lock, was also one of the largest in the world. When completed in 1859, the lock was 220 feet long and 40 feet wide in the chamber, second in size in America only to the pair of ship locks at Sault Ste. Marie on the Great Lakes, which were each 350 by 70 feet, with 9-foot lifts.

The first through passage was in 1859 by the company's little steamboat CALYPSO, towing a large iron barge southward. There was still more dredging to do to reach the desired 8-foot channel depth, and not all of the canal had yet reached the 61-foot width. Also required, because of the cuts, were three drawbridges - at Great Bridge, North Landing and Coinjock, with houses for the bridge tenders; and the U.S. Government did its bit by erecting two small lighthouses, one at the north end of the North Carolina Cut, and the other at the mouth of the North River (not to be confused with the North Landing River or the Northwest River!) which flows from there into Albemarle Sound.

Now virtually complete, the tolls started coming in. The Annual Report for 1860 shows timber, shingles and farm goods going north to Norfolk, and bread, flour, shoes and other city and imported goods going south.

---

2. For more details see Clifford R. Hinshaw, Jr., "North Carolina Canals before 1860," North Carolina Historical Review 25 No.1 (January 1948) pp.1-56.

---

3. Edmund Ruffin, Agricultural, Geological and Descriptive Sketches of Lower North Carolina, Raleigh, N.C., 1861, pp.143-45, quoted by Brown.

---

4. See Alexander C. Brown, "Reversible Head Locks," AMERICAN CANALS, 34:3 (August, 1980), his "The Guard Locks at Great Bridge," VIRGINIA CAVALCADE, Autumn, 1974, pp.70-79; and his "Canal Locks at Great Bridge Control Tide," Newport News DAILY PRESS, NEW DOMINION section, June 10, 1973, pp.8-10.

The Canal in the Civil War

The Albemarle & Chesapeake Canal should have been on its way to prosperity, but it opened just in time to serve the South - and the North - during the War Between the States. It was the North Carolina Cut which played a peculiar role during the war.

At first, the A&C Canal was a threat to the Union. Materials and supplies for Confederate forts along North Carolina's coastal islands went down the canal from Norfolk, and some of the A&C Company's tugs were requisitioned into the Confederate Navy as part of the "Mosquito Fleet" to protect the sounds. But when the coastal forts fell to the Union and the Mosquito Fleet was destroyed, the canal then became a threat to Norfolk - a possible route for Union forces coming north to take Norfolk and enter Virginia by the back way.

To prevent the Yankees from using the canal, a party of Confederates was sent down to block the southern end of the North Carolina Cut. On February 13, 1862, they were in the process of sinking a schooner and a dredging machine across it, when a Union force appeared from the south with the same purpose in mind - to block the cut - but from their point of view, it was to keep the Confederates from sending reinforcements down into North Carolina. After the Confederates fled, the Union troops sank two more schooners across the cut for good measure, and two months later came back and added some more obstacles.

The Union troops were to regret this action only a month later, in May 1862, when Norfolk surrendered and the Union forces needed to use the canal again. Clearing the obstructions placed by both sides was treated as a priority item, and the route was open again by the end of the month. (Also at this time, Union troops tried to block the Dismal Swamp Canal by blowing up South Mills Lock. The attempt was unsuccessful, but it made little difference because the dreaded Confederate ironclads they were trying to block were too wide to fit into the Dismal Swamp Canal locks anyway, but the Yankees didn't know that.)

The Canal after the War

It took some time to recover after the war. The canal was intact but most of the company's equipment and dredges and all of its tugs were gone (including the little CALYPSO) - and also gone were the small craft which used to ply the canal and pay the tolls. But traffic picked up by 1869, for example, when boats passing through the canal included 44 steamers, 136 schooners, 46 sloops and 22 barges. Because the canal never had a towpath, over 80% of these craft - all but the steamers - had to be towed at least through the two cuts.

By 1873 the wooden lock gates were old and rotting away, so the company installed two new pairs of wooden gates and, as an experiment, two pairs of galvanized iron gates. According to the company, this made the canal the first in America to have iron lock gates.

Another peculiarity of the canal was its line of stakes marking the channel down the wide estuary of the North Landing River. These stakes had to be constantly replaced as craft knocked them down at night; more permanent pilings could not be used because they would have pierced and sunk many of the craft using them as safety features. It was not until the 1870's that a light was placed on Faraby Island for the ships to bear on. Today there is a plethora of lights and buoys along the route, especially in the most tortuous places.

The primary maintenance problem on the A&C was dredging along the 70 miles of the project - not only in and between the cuts, especially along the North Landing River, but at each end, down the North and Elizabeth Rivers. The bends in the sinuous North Landing River were known as "Dutch Gaps" after the original one on the James, and were eventually (like the original Dutch Gap Canal) cut through, leaving a number of oxbows. In its spare time, the company contracted out its equipment and expertise further afield to build two canals in North Carolina. The first, completed in 1872, was the 4½ mile Fairfield Canal connecting landlocked Lake Mattamuskett northward to the Alligator River, which flows into the south side of Albemarle Sound. The second project, in 1885, was the New Berne and Beaufort Canal, now known as the Adams Creek - Core Creek link in the Intracoastal Waterway.

The A&C goes Bankrupt and is Bought by the Government

Nothing much changed on the A&C Canal until the Lake Drummond Canal and Water Company bought the deteriorating Dismal Swamp Canal, and at great expense in 1896-1899 enlarged it to nearly its present state, with only two locks, each 250 feet long and 40 feet wide - slightly bigger than those on the A&C. The Dismal Swamp Canal had intended in this way to get its traffic back from the A&C, and it worked so successfully that the A&C went into debt and had to be sold in 1911. For two years it went under the name "Chesapeake and Albemarle Canal" until, in 1913, it was sold to the U.S. Government and became once again the Albemarle & Chesapeake.

Now, under government control as part of its Intracoastal Waterway, the A&C became toll-free so it naturally took back all of the traffic from the unfortunate Dismal Swamp Canal, which promptly went bankrupt. In 1929, to be fair and to keep the DSC functioning as a scenic alternative to the A&C and as an essential means of transportation to local residents, the U.S. also bought the Dismal Swamp Canal and has operated it toll-free ever since.

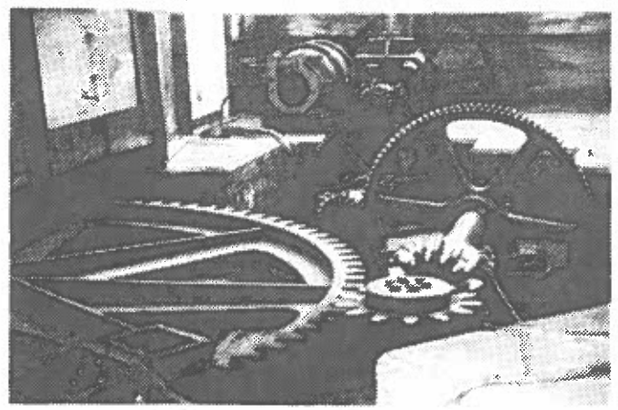
An Unsuccessful Canal Lock Experiment

Under government control, the A&C was gradually deepened to a project depth of 12 feet and the failing drawbridges were replaced. In 1917 an experiment was made to see if the lock at Great Bridge was really necessary for the enlarged canal. With the lock gates permanently open, the Corps measured a maximum velocity of 2.2 miles an hour in the Virginia Cut, not a problem for ships by that time. Therefore it was decided to remove the lock entirely, since both its width and depth were now less than the project standards. The old Great Bridge Lock was so substantially built that it took until 1923 to remove all of it except the north wall, which was retained as a wharf; meanwhile a by-pass channel took shipping around the site.

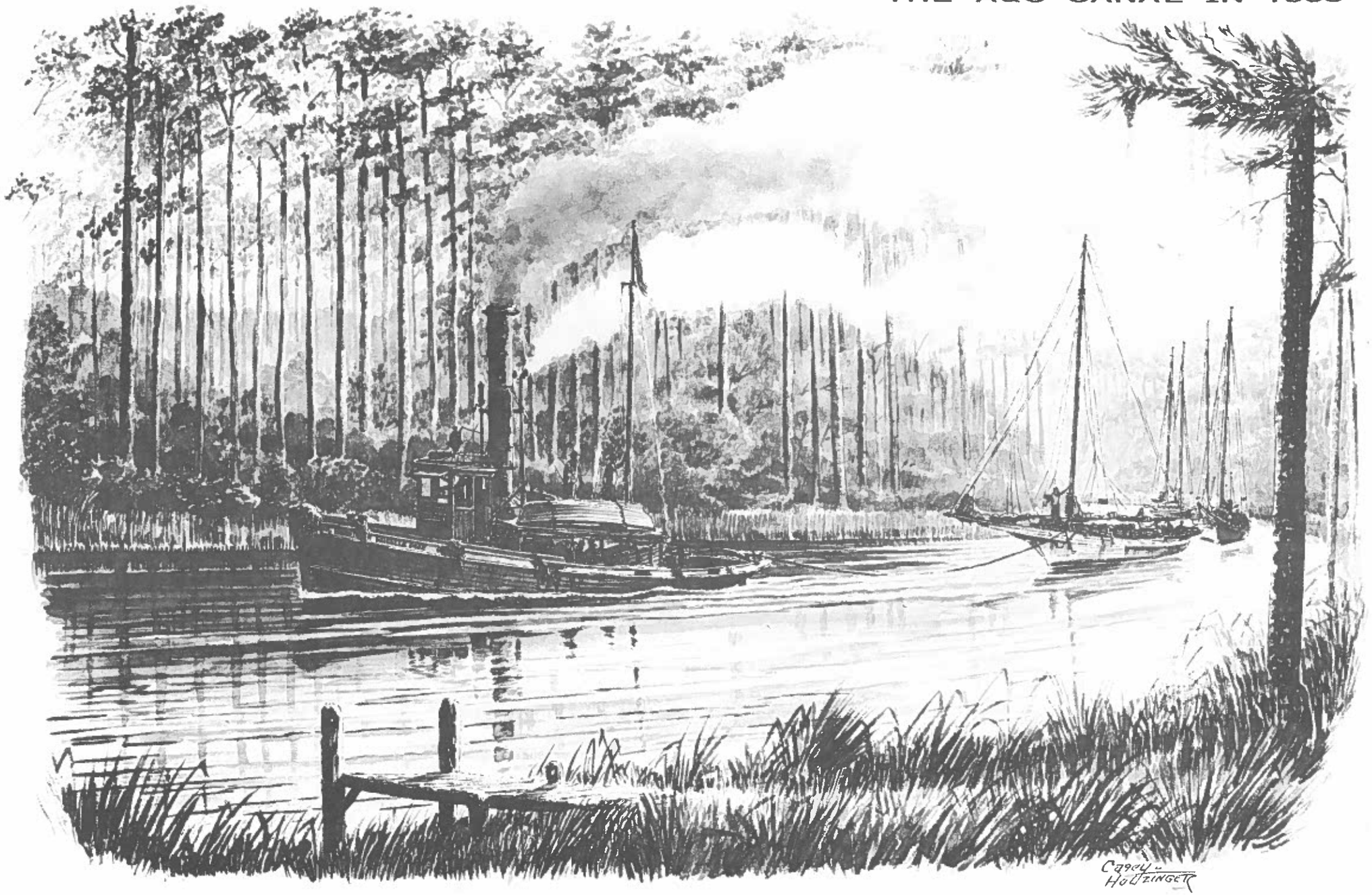
However, as time went on it was discovered that without the Great Bridge Lock, salt water - as well as sewage and floating trash from Norfolk - was seeping into Currituck Sound, ruining the duck hunting industry of the region and lowering property values. Shippers complained that there was indeed a dangerous current at times in the canal, and steamboat operators complained that they were unable to take on fresh water for their boilers while steaming along in the canal, but had to buy it in Norfolk.

This early environmental confrontation with the Corps resulted in the construction of a lock to replace the old one in 1931-1932. This lock was of necessity larger and deeper than the old one, 600 feet long, 75 wide and 16 deep, built economically of concrete and sheet piling, with a sand floor. The gates were placed as in the original lock, with two pairs at each end so as to operate in either direction; each gate was of steel, 26 by 42 feet and weighing 45 tons, and operated by electric motors. This lock worked well for 40 years without major repairs until it was found that some of the sand bottom along the north wall, where most boats moored, was being washed out by propeller wash. In 1972-74 this wall was reinforced with concrete, narrowing the chamber to 73 feet, and the lock bottom there and across the gate aprons was resurfaced with concrete slabs.

Today the Albemarle & Chesapeake Canal is the main route for commercial shipping through the Dismal Swamp region. Yachtsmen also use it (and the Dismal Swamp Canal) for their annual migrations to Florida. From a convenient grandstand in Great Bridge Lock Park, thoughtfully provided by the City of Chesapeake, it is possible to watch the reversible head lock at work, the descendant of the first such lock ever constructed, and of the first in America to have had iron gates, on a waterway which lays claim to being the first of the modern sea-level ship canals.

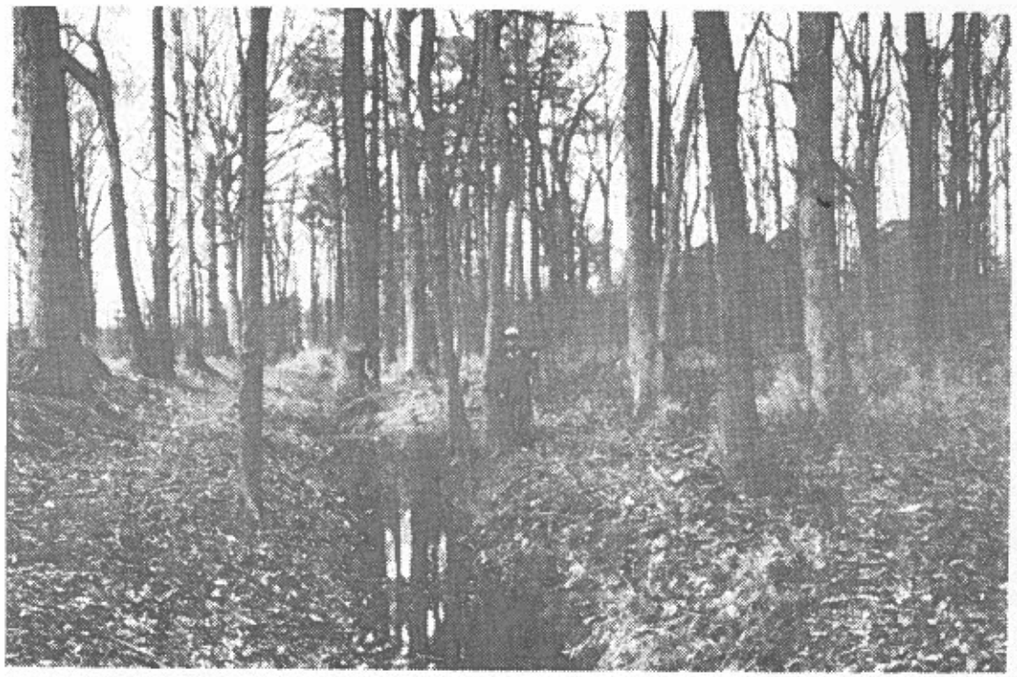


This machinery opens and closes one of Great Bridge Lock's gates. (1992)



THE ALBEMARLE & CHESAPEAKE CANAL IN 1900, one of Casey Holtzinger's historic prints, reproduced courtesy of the Imperial Gallery in Virginia Beach. The A&C Canal never had a towpath, so from the beginning it was designed for steamboats and for tugboats towing schooners, sloops and barges.

IN MEMORY OF THE KEMPSVILLE CANAL
A CANAL CONSTRUCTION TIME CAPSULE
1858 – 1988

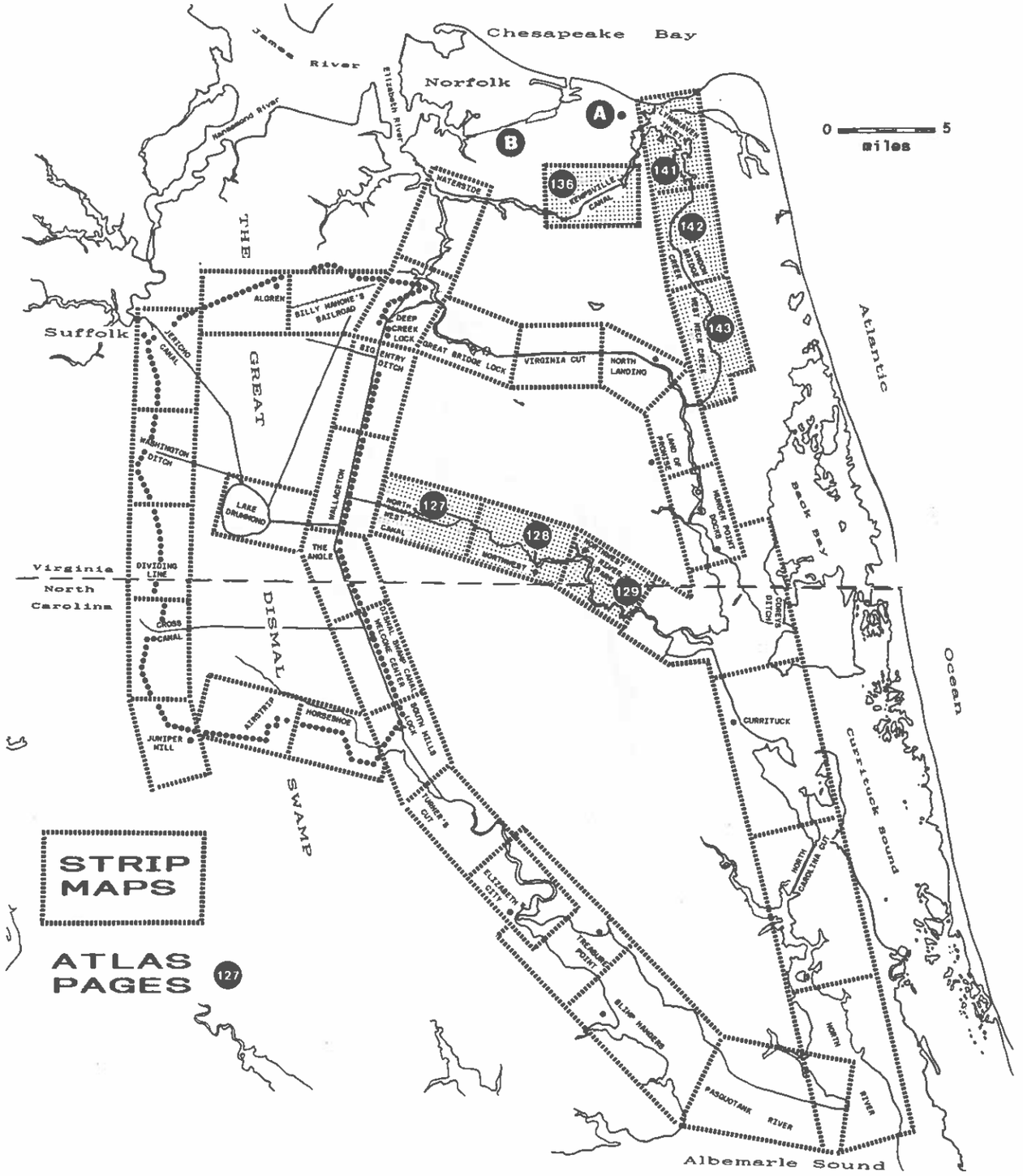


THE KEMPSVILLE CANAL IN 1983, looking west toward Euclid (Trout photos).

Compare these views with the drawings based on these remains, on page 139.
The ditches reveal the method used for digging the canal a century and a half ago.

LEFT: The canal builders first dug two longitudinal trenches to define the edges of the canal. The spoil was thrown off to the side - note the bank on the left. This view is near the east end of the canal workings, along the trench on the south side of the canal.

RIGHT: This view is from further west, showing the canal workings at a more advanced stage. The spoil has been removed from the canal proper, between the longitudinal ditches, and thrown to the side - note the higher bank on the left. We think the "islands" left in the canal were at tree stumps which the workmen would have removed during the next stage of the process. But they stopped work in the middle of construction, leaving this evidence of their methods.



STRIP MAPS

ATLAS PAGES 127

PART 4:

CANOEING & EXPLORING THE GREAT DISMAL'S OTHER SCENIC WATERWAYS

120 CHESAPEAKE'S SCENIC WATERWAYS

122 VIRGINIA BEACH SCENIC WATERWAYS

124 ALBEMARLE REGION SCENIC WATERWAYS

126 **THE NORTH WEST RIVER AND ITS CANAL**

127 The North West Canal

128 The Town of Northwest

129 Northwest River Park Canal

136 **THE KEMPSVILLE CANAL**

140 **MORE HISTORIC CANALS IN VIRGINIA BEACH**

The Canal Which Created Lynnhaven Bay

The Long Creek - Broad Bay Canal

The "Lost" British Canal

Lake Joyce Island's Canal A

The Norfolk and Princess Anne Canal B

141 **THE LONDON BRIDGE CREEK - WEST NECK CREEK CANAL**

STRIP MAPS IN PART 4 ARE SHADED

The following six pages cover the canoe trails in Chesapeake, Virginia Beach, and part of North Carolina. The canoe trail maps are also useful road maps for these regions. For more detailed canoeing information see the latest editions of CLASSIC VIRGINIA RIVERS by Ed Grove, and VIRGINIA WHITEWATER by Roger Corbett.

The material on these two pages has been taken with permission from CHESAPEAKE SCENIC WATERWAYS, a booklet and map published in 1976 by the Chesapeake Department of Parks and Office of Public Communications, and alas, now out-of-print. For more information call or write the Department at Civic Center, Chesapeake, VA 23320, (757) 382-6411.

ACCESS POINTS FOR CHESAPEAKE'S SCENIC WATERWAYS:

TRAIL 1, DISMAL SWAMP CANAL, 9 miles: Put-in at Deep Creek, take-out at the Feeder Ditch boat ramp.
TRAIL 2, FEEDER DITCH TO LAKE DRUMMOND, 8.5 miles round-trip, Put-in and take-out at the Feeder Ditch boat ramp.
TRAIL 3, NORTHWEST RIVER, MIDDLE SECTION, 8 miles: Put-in at Bunch Walnuts Road, take-out at Battlefield Boulevard.
TRAIL 4, NORTHWEST RIVER, INDIAN CREEK AREA, 3 to 6 miles: Put-in at Battlefield Boulevard, take-out at Indian Creek Road at the head of either Indian Creek or Smith Creek.
TRAIL 5, POCATY CREEK, 5 miles: Put-in and take-out at Blackwater Road.
TRAIL 6, SOUTHERN BRANCH TO DEEP CREEK LOCKS, 4 miles: Put-in under I-64 on the east side of Elizabeth River (see page 103),take-out at Deep Creek Locks Park.

Strip maps for all of these trails are in THE GREAT DISMAL ATLAS.

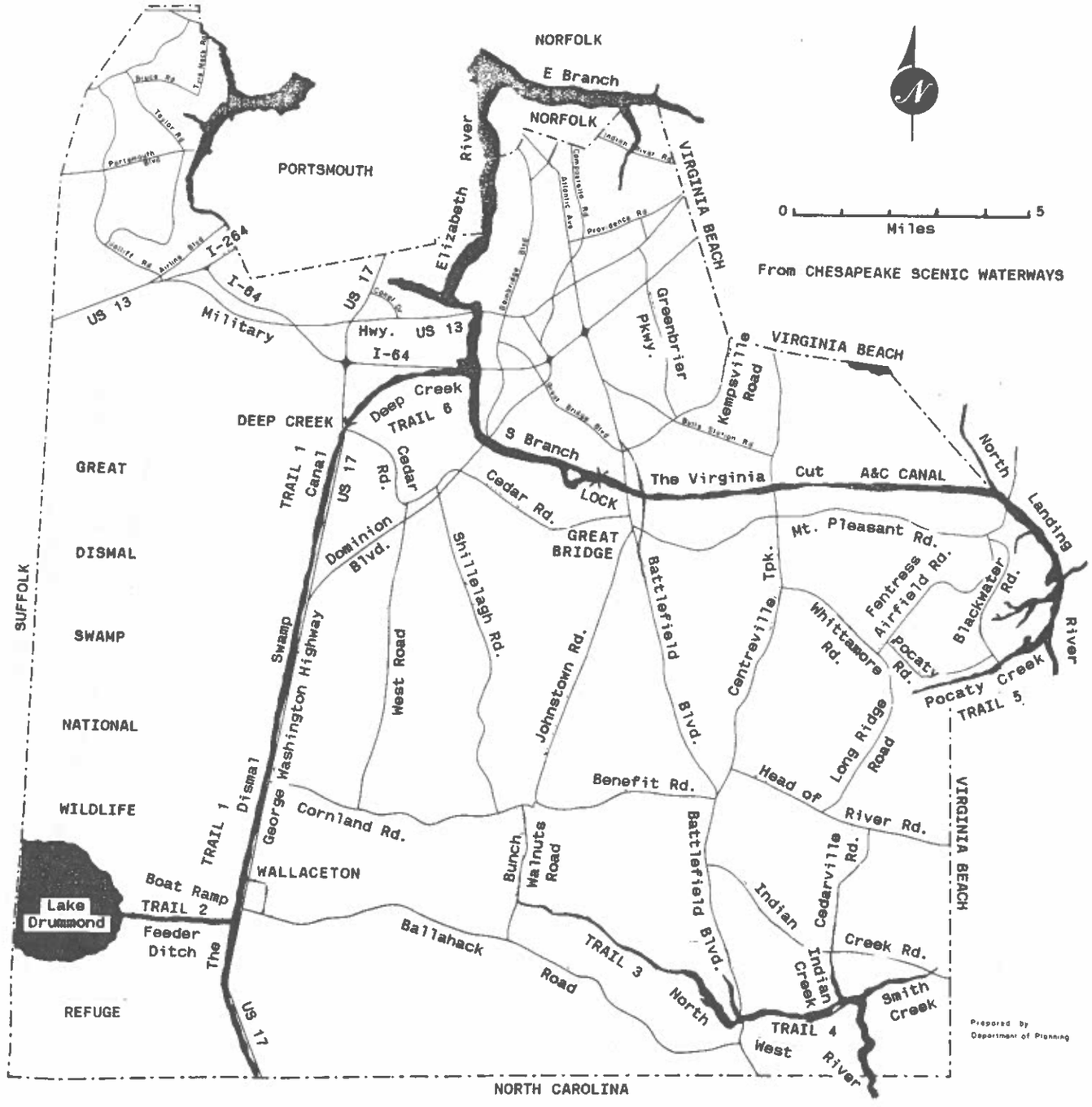
INTRODUCTION

We are fortunate in Chesapeake to have within our boundaries several places where the beauty of the wild still lingers, untouched by the press of civilization. Unique among these areas are our intertwining scenic waterways.

Recognizing the value of this natural resource to its citizens, Chesapeake City Council in 1974, adopted a Scenic Waterways Program as part of the City's Master Leisure Time Activities Plan. This unusual and farsighted program recognizes the outstanding recreational and scenic values of several of our waterways, identifies the areas involved and encourages the wise and careful enjoyment of them by all citizens and visitors.

This brochure describes the first six Scenic Waterway Trails, provides a location map which includes a trails key and access points plus general rules for use and preservation of their natural beauty. The map is designed as a pull-out to accompany you on the river, leaving this brochure for your future use and enjoyment.

We hope you will use these trails, enjoy them and leave them intact and unlittered, respecting their natural beauty and preserving it for the enjoyment of others, now and in years to come.



Trail 1 Dismal Swamp Canal

During the colonial and Civil War period, this canal served as a major north-south commercial artery. To the west lies the Great Dismal Swamp. The west bank of the canal may well become a natural arboretum, making this a most unusual trip for both flora and fauna enthusiasts.

Current flow is generally north, but negligible and the trail can be traversed in either direction. Put-in at Deep Creek Lock Park and take-out at Route 17 ramp some 900 feet north of Ballahack Road.

Trail Warnings:

Yacht traffic will be encountered spring and fall—watch for wakes. The canal banks are steep, slick and difficult to climb if one should spill. Avoid this area when water temperature falls below 50 degrees.

Trail 2 Feeder Ditch

Lake Drummond

Lake Drummond lies in the center of the Great Dismal Swamp and offers primitive camping at the reservation site. Unique in both flora and fauna, this trail affords a pleasant overnight excursion.

A long, straight, man-made canal with lush bank growth, leads to the Army Corps of Engineers Lake Drummond Reservation. A short portage puts you within an easy paddle to Lake Drummond. Put in/take-out located at Route No. 17, approximately 900 feet north of Ballahack Road.

To reserve a space at the Feeder Ditch campground call the Great Dismal Swamp National Wildlife Refuge, (757) 986-3705.

Trail 3 Northwest River

Middle Section

Fishing opportunities are abundant, including Chain and Red Pickerel in the upper reaches, and Largemouth Bass, Crappie and Bream in the lower section. Much wildlife can be observed throughout the trip by the silent canoeist.

The beginning of this trail presents a narrow winding swamp creek, but half-way down the character changes to a wide, broad river with swampy banks. Beyond the old Cedarworks Railroad the river widens and islands appear, offering alternate channels. Current flow is mild.

Put-in at Bunch Walnuts Bridge and take-out at Route 168.

Trail Warnings:

Many snakes may be observed, especially in the spring. Avoid overhanging branches. In case of a spill, do not attempt to walk out through the swamp. Be cautious of wakes from large outboards which may be encountered on the lower stretches.

Trail 4 Northwest River

Indian Creek

This section of the Northwest, one of Virginia's proposed scenic rivers, still offers the primitive quality of wilderness with only occasional evidence of man's encroachment. Chesapeake's Indian Creek Park, presently under development, will provide a focal point for this trail.

Many wide creeks, channels and passages await the explorer and the fisherman with good fishing opportunities. Flora and fauna generously enhance the broad and well-traveled river. This trail can be run from either direction, Battlefield Boulevard (Route 168) to Indian Creek Bridge or vice versa. An optional side trip up Smith Creek would add 2.5 miles to the trail.

Trail Warnings:

Large boats may cause troublesome wakes. One should be well aware of poisonous snakes. Low overhanging branches can harbor cottonmouth moccasins.

Trail 5 Pocaty Creek

In the center of the greater metropolitan area, enthusiasts will be amazed by a sense of isolation and remoteness available in this section. The quiet boater will be richly rewarded on this trail.

This is a roundtrip trail, beginning and ending at the bridge on Blackwater Road. Here, the stream is small but it soon widens out to what appears to be prime Largemouth Bass habitat. The trail is in an old, cutover cypress swamp which is reforesting itself. Quiet, winding, narrow creeks lead off and dead-end, ideal for observing wildlife and birds.

Nearing the North Landing River (Inland Waterway), the creek widens and becomes less scenic. Large craft may be encountered on the waterway and a retracing to the Blackwater Road Bridge is recommended.

Trail 6 Southern Branch

Deep Creek Locks

A scenic, winding channel on this trail will bring you to a sandy beach take-out behind the Deep Creek Lock Park where pleasant picnic sites are available.

The put-in is a bit tricky. Turn in towards the river immediately south and under the Interstate overpass on Bainbridge Boulevard. Follow the dirt road along the southside, then directly under and along the northside of the overpass to the put-in at a sloping, sandy beach. Cross the main channel of the Elizabeth River upstream of the Interstate bridge and enter the canal on the west side of the river.

Trail Warnings:

Extreme caution should be exercised in this area and life jackets must be worn. Large boats and ships use the river channel. The main channel crossing should not be attempted during windy periods or in cold weather. The west side of the river is a popular water-skiing area, so watch for wakes.

From CHESAPEAKE SCENIC WATERWAYS

VIRGINIA BEACH WATERWAYS

THE CITY OF VIRGINIA BEACH has created an extensive Scenic Waterway System - some waterways suitable for yachts, some for canoes and kayaks. The information on these two pages is from the VIRGINIA BEACH WATERWAY ACCESS brochure published by Virginia Beach Parks and Recreation, reproduced with permission. The original map was created by Virginia Beach Public Works-Mapping. Copies of the brochure are available at the Visitor Information Center, Mount Trashmore Visitor Center, and the Public Information Office, (757) 427-4111.

The map and text describe the official boating access points to the Virginia Beach Scenic Waterways System, as of January 1997. An Outdoor Plan Newsletter is also available. For more information call Virginia Beach Parks and Recreation, (757) 563-1100; TDD: (757) 471-5839; website: http://www.virginia-beach.va.us.

Elsewhere in THE GREAT DISMAL ATLAS, several of these Virginia Beach waterways are covered by strip maps, in more detail. These are ELIZABETH RIVER (see the Kempsville Canal); NORTH LANDING RIVER (see the Albemarle & Chesapeake Canal); and WEST NECK CREEK (see the Virginia Beach Scenic Waterway).

Points to Remember

Much of the land adjacent to the waterways is private property.

Please abide by any trespassing signs and posted rules and regulations. City and state ordinances are enforced at each site.

The Waterway System traverses a unique and varied environment. Please pack out your trash.

Please observe safe boating practices. Be cautious of wakes from large boats which may be found along components of the Waterway System.

Many areas are strongly affected by tidal changes.

Snakes may be observed, especially in the spring.

Poison ivy, oak, and sumac are common along some banks.

Insect populations may be large; the use of insect repellent is strongly advised

The City of Virginia Beach assumes no liability for injury or property damage due to your use of any part of the Waterway System.

From VIRGINIA BEACH WATERWAY ACCESS

Back Bay Access

1 Back Bay National Wildlife Refuge

Operated by Department of the Interior, U.S. Fish and Wildlife Service
Phone: 757-721-2412

Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, turn left onto Princess Anne Road. Travel about .8 miles and turn left at the stoplight onto Sandbridge Road. Continue about 2.1 miles and turn left at the stop sign. Travel 3.3. miles and turn right onto Sandpiper Road. Travel about 4.2 miles. Back Bay National Wildlife Refuge will be at the end of Sandpiper Road.

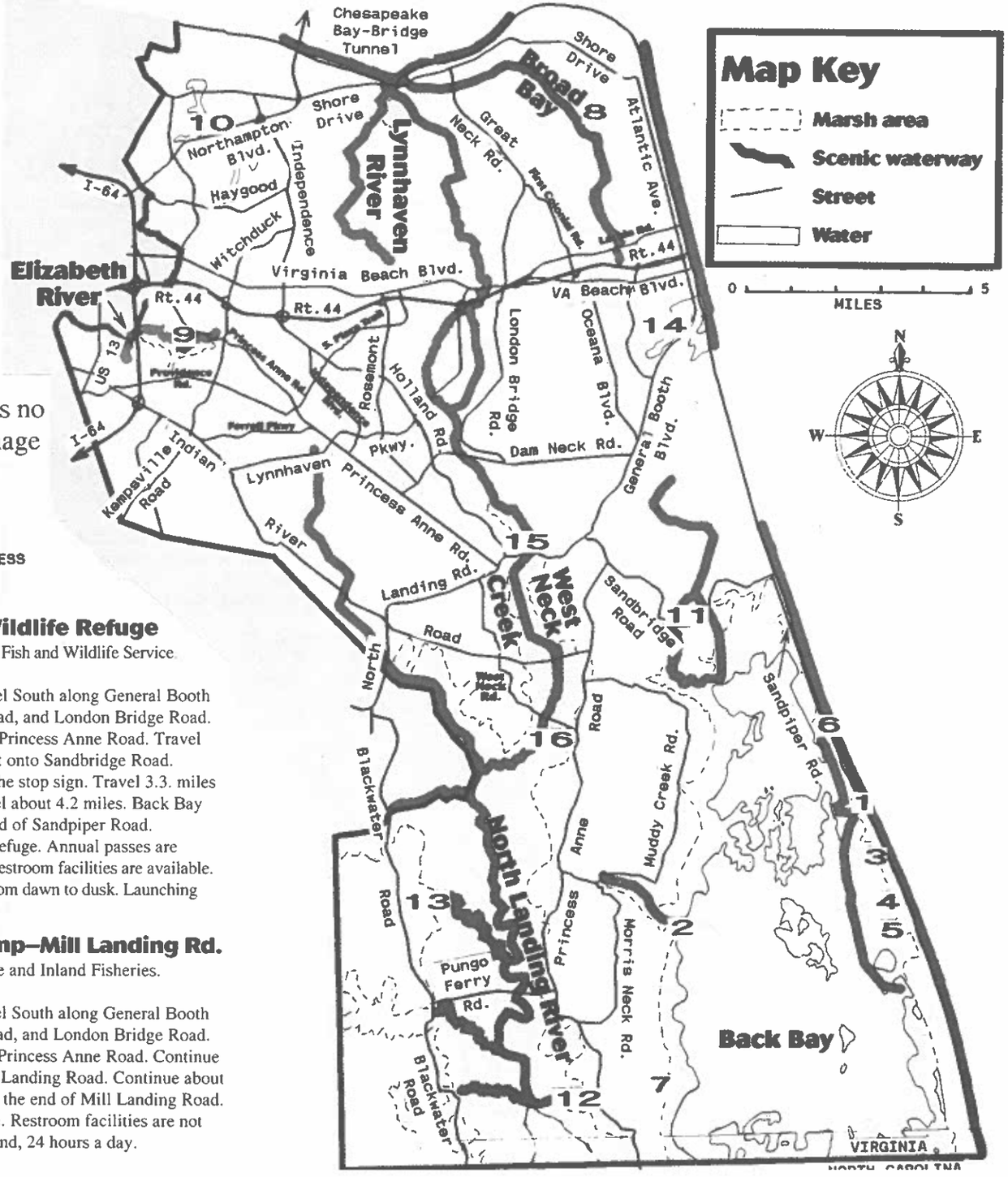
Site info: There is a $4 entry fee for the refuge. Annual passes are available, call for for more information. Restroom facilities are available. The refuge and ramp are open year round from dawn to dusk. Launching facilities are for non-motorized boats only.

2 Drum Point Boat Ramp—Mill Landing Rd.

Operated by Virginia Department of Game and Inland Fisheries.
Phone: 757-426-6320

Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, turn left onto Princess Anne Road. Continue for about 8.1 miles and turn left onto Mill Landing Road. Continue about 3 miles. Drum Point Boat Ramp will be at the end of Mill Landing Road.

Site info: Parking and ramp use are free. Restroom facilities are not available. The launch site is open year round, 24 hours a day.



3-5 False Cape State Park–Barbour Hill, False Cape Landing & Wash Woods

Operated by Virginia's Department of Conservation & Recreation.
Phone: 757-426-7128
Directions: These sites are only accessible by non-motorized boats. Boat docks are provided at all 3 sites.
Site info: The park is generally open from dawn to dusk; please call in advance for specific park hours. Each dock is located near a hiking trail which leads to pit toilets; drinking water is not available.

6 Little Island Park

Operated by Virginia Beach Parks & Recreation. Phone: 757-426-0013
Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, turn left onto Princess Anne Road. Travel about .8 miles and turn left at the stoplight onto Sandbridge Road. Continue about 2.1 miles and turn left at the stop sign. Travel 3.3. miles and turn right onto Sandpiper Road. Travel about 3.7 miles. Little Island Park will be on your left.
Site info: There may be a fee for parking during the summer. Restroom facilities are available. The park is open year round from dawn to dusk. To access the Atlantic Ocean, you will need to transport your canoe/kayak from the parking lot to the beach (approximately 50 yds.) To access Back Bay, you will need to transport your craft across the road (approximately 50 yds.)

7 Trojan Waterfowl Management Area

Operated by Virginia Department of Game and Inland Fisheries
Phone: 757-426-6320
Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, turn left onto Princess Anne Road. Travel about 13.2 miles to Back Bay Landing Road. Turn right onto Back Bay Landing Road and continue about 1.6 miles. The Trojan Waterfowl Management Area is at the end of Back Bay Landing Road.
Site info: Parking is free. Restroom facilities are not available. The ramp is open year round, 24 hours a day. Please abide by posted management area rules and regulations.

Broad Bay Access

8 64th Street-First Landing State Park

Operated by Virginia's Department of Conservation and Recreation.
Phone: 757-481-2131
Directions: From the Resort area, traveling North along Atlantic Avenue. Turn left onto 64th Street and proceed into First Landing State Park.
Site info: There is an entry fee for the park; use of the ramp is free for non-motorized craft. Restrooms facilities and drink machines are available. The park and ramp are open year round from 8 am to dusk.

Elizabeth River Access

9 Elizabeth River at Carolanne Farm Park

Operated by Virginia Beach Parks and Recreation. There is no phone at the site.
Directions: From the Resort area, take Route 44 to Witchduck Road. At the stoplight at the bottom of the exit ramp, turn left onto Witchduck Road. At the Princess Anne Road stoplight, turn right. Turn left at the first stoplight after the Witchduck Road intersection onto Parliament Drive. At the stopsign you will see Carolanne Farm Neighborhood Park; this is not the park with the waterway access. Turn right onto Challedon Drive (this will become Gainsborough Rd.). Travel about .7 miles; Carolanne Farm Park will be on your left.
Site info: Parking is available along the street. You will need to transport your canoe/kayak to the launch facility. Restroom facilities are not available. The launch facility is open year round from dawn to dusk.

Lake Smith Access

10 Lake Smith Fishing Station

Operated by the City of Norfolk. Phone: 757-460-2487
Directions: From the Resort area, travel North along Atlantic Avenue. This will become Shore Drive. Turn left onto Northampton Blvd. Pass Pleasure House Road, Independence Blvd, and Jack Frost/Shell Road. Turn left immediately after passing the lake onto Shell Road and turn left into the Lake Smith Fishing Center.
Site info: Parking is free. Restroom facilities are available. The Fishing Station is open year round sunrise to sunset. Various fees are charged; call for more information.

North Bay Access

11 Lotus Garden Park

Operated by Virginia Beach Parks and Recreation. There is no phone at the site.
Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, turn left onto Princess Anne Road. Travel about .8 miles and turn left onto Sandbridge Road. Travel about 2.1 miles and turn left at the stopsign. Cross the small bridge. Lotus Garden Park is on the right hand side, just past the bridge.
Site info: Parking is limited; restroom facilities are not available. The park is open year round from dawn to dusk.

North Landing River Access

12 Munden Point Park

Operated by Virginia Beach Parks & Recreation. Phone: 757-426-5296
Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, turn left onto Princess Anne Road. Travel about 20 miles and turn right onto Munden Point Road. Travel about 1 mile then turn right onto Pefley Lane. Munden Point Park is at the end of Pefley Lane.
Site info: Parking, ramp use, and dock use are free. Restroom facilities are available. Both the ramp and the dock are open year round from dawn to dusk. Canoe rentals are available from April through October. A $3 deposit is required. Each half hour cost $1.50. One person in the canoe must be age 16 or older; rental canoes are not allowed into the Intercoastal Waterway.

13 North Landing River Natural Area Preserve

Operated by Virginia's Department of Conservation and Recreation.
Phone: 757-481-2131
Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, continue straight on Princess Anne Road. At the Virginia Beach Municipal Center go straight; you will now be on North Landing Road. Cross the Chesapeake border. Turn left onto Fentress Airfield Station and immediately turn left onto Blackwater Road. Travel about 5 miles and pass Old Carolina Road. Turn left into the North Landing River Natural Area Preserve, just pass Old Carolina Road.
Site info: Parking and launch use are free. You will need to transport your canoe/kayak .44 miles from the parking area. A porta-john is available; there is no running water. The Preserve is open 8 a.m. to dusk daily.

Rudee Inlet Access

14 Owls Creek Boat Ramp

Operated by Virginia Beach Parks and Recreation. There is no phone at the site.
Directions: From the Resort area, travel South across the Rudee Inlet Bridge. Travel about a half mile and turn right into the Owls Creek Municipal Boat Ramp parking lot, just before the Virginia Marine Science Museum.
Site info: Parking is free. Restroom facilities are not available. The ramp and parking lot are open year round from dusk to dawn.

West Neck Creek Access

15 Launch at Dozier's Bridge

Operated by Virginia Beach Parks & Recreation. There is no phone at the site.
Directions: From the Resort area, travel South along General Booth Blvd. Pass Birdneck Road, Dam Neck Road, and London Bridge Road. At the stoplight at the 7-11, go straight onto Princess Anne Road. Dozier's Bridge is approximately .3 miles after the Seaboard Road stoplight. The launch facility is on the right immediately after crossing the bridge.
Site info: This site features a parking lot and wooden launch. No restroom facilities are available.

16 West Neck Marina

Address: 3985 West Neck Road. Phone: 757-426-6735
Directions: From the Resort area, travel South along General Booth Blvd. At the stoplight at the 7-11, continue straight on Princess Anne Road. At the Virginia Beach Municipal Center go straight; you will now be on North Landing Road. Turn left onto West Neck Road. Pass Indian River Road. After you cross West Neck Bridge, West Neck Marina will be on the right hand side.
Site info: There is a fee for parking. Bathroom facilities are available. Kayak rentals and guided tours are available for a fee. West Neck Marina is generally open daily from dawn to dusk.

The Albemarle Region Canoe and Small Boat Trails System

Eastern North Carolina's abundant water resources and their natural beauty beckon residents and visitors alike. Recognizing the potential appeal of this area to outdoor enthusiasts of all kinds, the Albemarle Resource Conservation and Development Council, which serves the ten counties of the Albemarle area in northeastern North Carolina, initiated a project to inventory all streams suitable for canoes and small boats and then try to establish a trails system with signage and brochures. Tom Potter, Trails Specialist with the Division of Parks and Recreation, assisted the RC&D Council with the project. These trails offer a perfect way to discover and explore eastern North Carolina's coastal waters.

Canoe and Small Boat Trails

Boards of County Commissioners in all ten Albemarle counties have officially designated the selected streams as local canoe and small boat trails. Access points have been located along state roads for easy in and out sites. The 29 streams offer almost 200 miles of beautiful scenic hardwood forests and swampland. A canoe trail is located on public trust waters, but often flows through private property. In most cases, the river banks are privately owned and not open to public use. Designation of a stream as a canoe trail does not mean it is only used for canoeing. These public waters are open to many kinds of users, including motorboaters. Using courtesy and common sense is important for a safe and enjoyable trip.

Canoeing in northeastern North Carolina can be many things — a quiet paddle along a peaceful river in early morning, the excitement of a deer or bear swimming across the stream or the flutter of wings as a pair of wood ducks fly ahead of you. It can be done with friends or family or even by yourself. Whether it's for a few hours or a few days, grab a paddle and come discover how much fun canoeing in the Albemarle area can be!

Canoe Trail Descriptions

1 - Merchants Millpond–2 miles

A beautiful millpond setting is filled with buttressed cypress trees mixed with a variety of hardwood species covered in moss. Rental canoes, access, and primitive camping are available at Merchants Millpond State Park. The mill pond is an ideal family outing experience for beginners. Camping is most ideal during early spring and late fall.

12- Upper Pasquotank River–18 miles

This trail offers an overnight canoeing experience on the banks of the Great Dismal Swamp Canal. The first day's excursion begins at the Old 17 bridge crossing and ends at the intersection of the river with the Intracoastal Waterway. The high banks of the waterway offer primitive campsites for your overnight stay. You have the option on your second day of canoeing up the Canal to a landing on SR 1211 or continuing down the river. A cut-through 4 miles below the access point provides a shorter 5 mile trip.

13- Sawyers Creek–3miles

This short, leisurely trail begins at a bridge on NC 343 in Camden County and continues to a take-out on SR 1200. Slow-moving water makes this trail ideal for a beginning canoeist. Downstream from the bridge, this creek intersects with the Pasquotank River near a railroad crossing.

14- Areneuse/Mill Dam Creeks–2 miles

Located in southern Camden County between NC 343 and Treasure Point 4-H Camp, this scenic two-mile trail is also ideal for beginners. The creek snakes its way through pristine hardwood swamps abundant with wildlife and other critters. Loop or one-way travel is possible.

15- Moyock Creek and Northwest River–10 miles

Beginning at the unique camel-back bridge in Moyock, this trail begins as a narrow hardwood swamp and opens up into the Northwest River which flows into Tull Bay. As the trail follows Northwest River, it passes through typical brackish marsh estuaries. Tull Bay Marina and Restaurant is the terminus for this 10-mile canoe trip. For those wishing to travel north, you can follow Northwest River into Virginia to the Northwest River Park.

16- Tull Creek–8 miles

Small pine thickets dot the surrounding marshes of Tull Creek as it passes through local fishing hot-spots. Ideal for beginning canoeists, this slow-moving stream offers an enjoyable family outing. At Sligo, near the Sligo Restaurant, you can become landbound once again. This area is prolific with wildlife.

17- Indiantown Creek– 7 miles

This trail begins at a double culvert on SR # 1148 and continues downstream to a local ramp at the Camden-Currituck County line on SR #1147. It traverses the headwaters at Indiantown Creek through magnificent hardwood and Cypress Swamps. The second section begins at the local ramp and continues downstream to Frog "Crik" and East Canal before forming the North River. These backwaters are home to a variety of wildlife species and are adjacent to the Wildlife Commission Bear Sanctuary. At the oxbow in North River, return to the local ramp to complete this trail.

Canoeing Regulations and Safety Tips

Safety Equipment Checklist:

- Flotation Gear. (Regulations require a Coast Guard approved wearable personal flotation device for each occupant.)
- First Aid Kit. Add insect repellent and sunscreen.
- Extra paddle.
- Bow and stern lines.
- Flashlight and extra batteries.

Allow Enough Time

- Allow two miles per hour canoeing time under normal river conditions.
- Driving and shuttling time is extra.

Know the Water

- Check recent and predicted weather conditions.
- Find out about river conditions - flooded, low, or normal.
- A flooded river is often dangerous and should not be canoed.
- A low river may expose logs and stumps, requiring many liftovers or portages, which make the trip slower and more difficult.
- Coastal streams are affected by wind tides which can create flow in both directions.
- Windy conditions can affect canoes and small boats — especially on wide coastal rivers.

Play it Safe

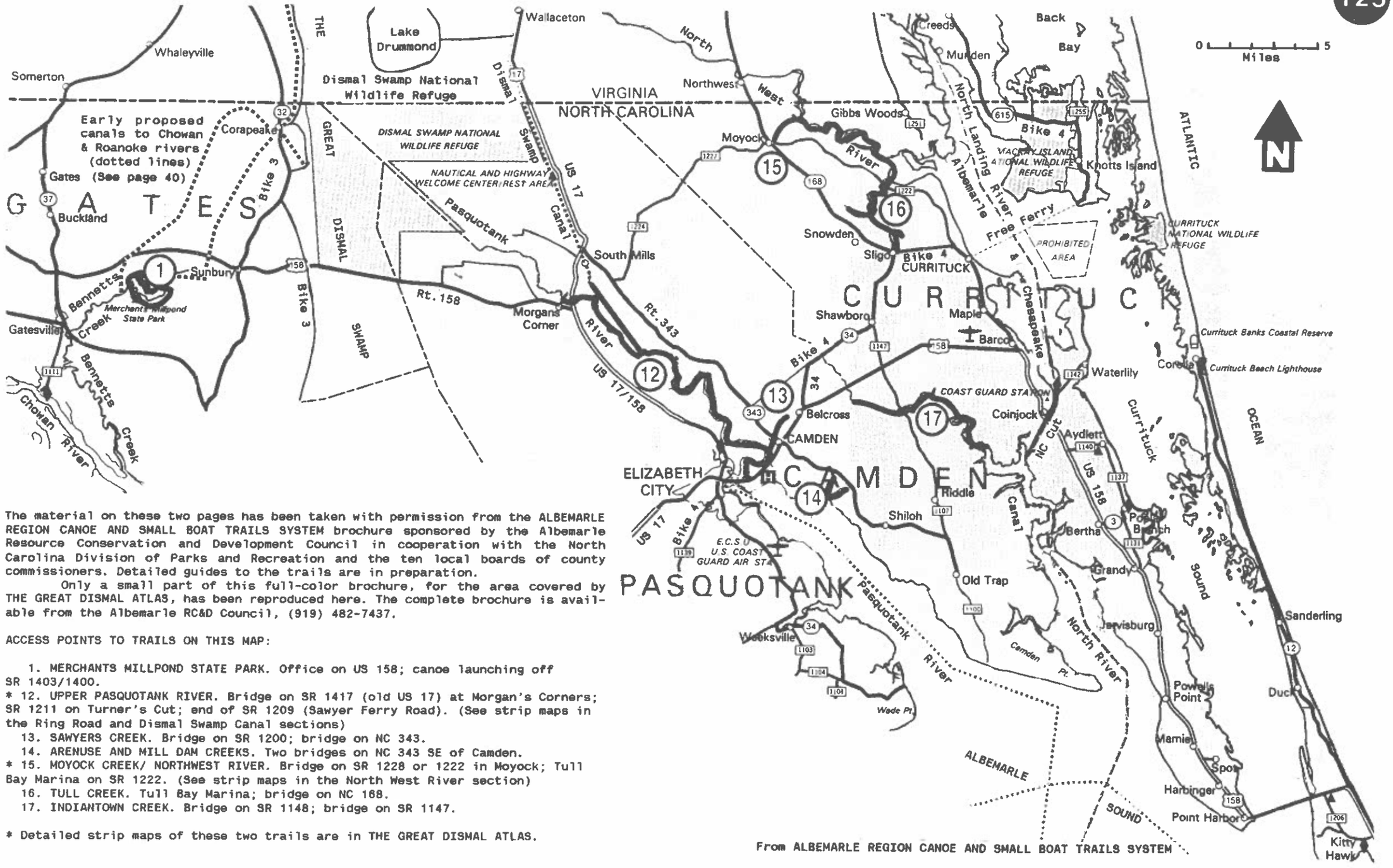
- Secure your car and take keys with you.
- Canoe in a group or with a buddy.
- Watch for motorboats and yachts. Stay to the right and turn the bow into the wake.
- Let someone know your plans — where you are canoeing and when you plan to be back.
- Place food and gear in water-tight containers and tie them securely to the canoe.
- Don't overload the canoe or small boat. Avoid horseplay.
- Carry drinking water.

Respect Property

- Don't litter or pollute the water with trash or other waste.
- Don't cut living trees or harrass animals.
- Be careful with campfires. Use cookstoves when possible.
- Access to private land should be by invitation only.
- Camp only in designated areas to avoid trespassing.

From ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM

ALBEMARLE REGION WATERWAYS



The material on these two pages has been taken with permission from the ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM brochure sponsored by the Albemarle Resource Conservation and Development Council in cooperation with the North Carolina Division of Parks and Recreation and the ten local boards of county commissioners. Detailed guides to the trails are in preparation.

Only a small part of this full-color brochure, for the area covered by THE GREAT DISMAL ATLAS, has been reproduced here. The complete brochure is available from the Albemarle RC&D Council, (919) 482-7437.

ACCESS POINTS TO TRAILS ON THIS MAP:

1. MERCHANTS MILLPOND STATE PARK. Office on US 158; canoe launching off SR 1403/1400.
* 12. UPPER PASQUOTANK RIVER. Bridge on SR 1417 (old US 17) at Morgan's Corners; SR 1211 on Turner's Cut; end of SR 1209 (Sawyer Ferry Road). (See strip maps in the Ring Road and Dismal Swamp Canal sections)
13. SAWYERS CREEK. Bridge on SR 1200; bridge on NC 343.
14. ARENUSE AND MILL DAM CREEKS. Two bridges on NC 343 SE of Camden.
* 15. MOYOCK CREEK/ NORTHWEST RIVER. Bridge on SR 1228 or 1222 in Moyock; Tull Bay Marina on SR 1222. (See strip maps in the North West River section)
16. TULL CREEK. Tull Bay Marina; bridge on NC 168.
17. INDIANTOWN CREEK. Bridge on SR 1148; bridge on SR 1147.

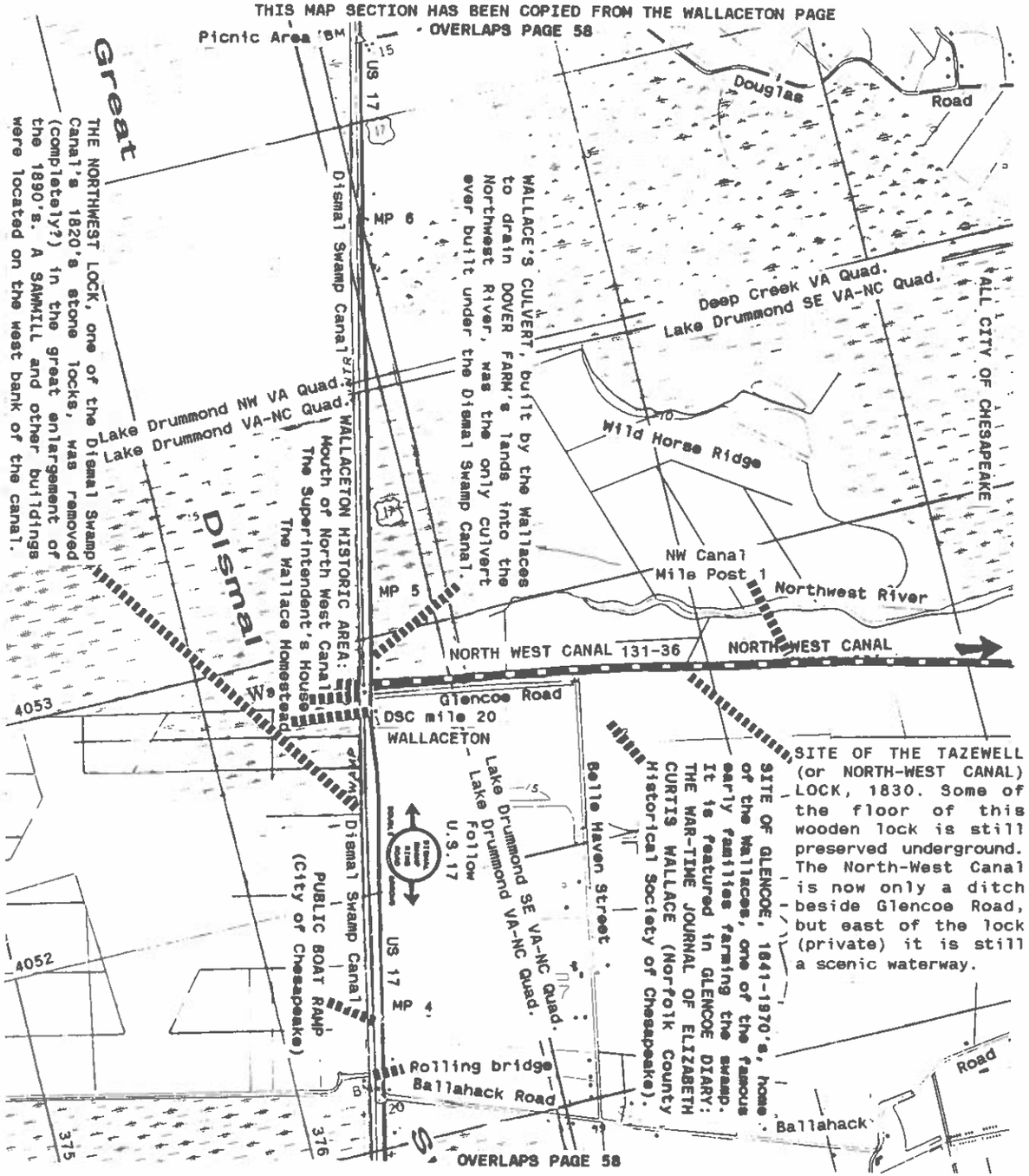
* Detailed strip maps of these two trails are in THE GREAT DISMAL ATLAS.

From ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM

THE NORTH WEST CANAL: THE DISMAL SWAMP'S "GATEWAY TO THE SEA"

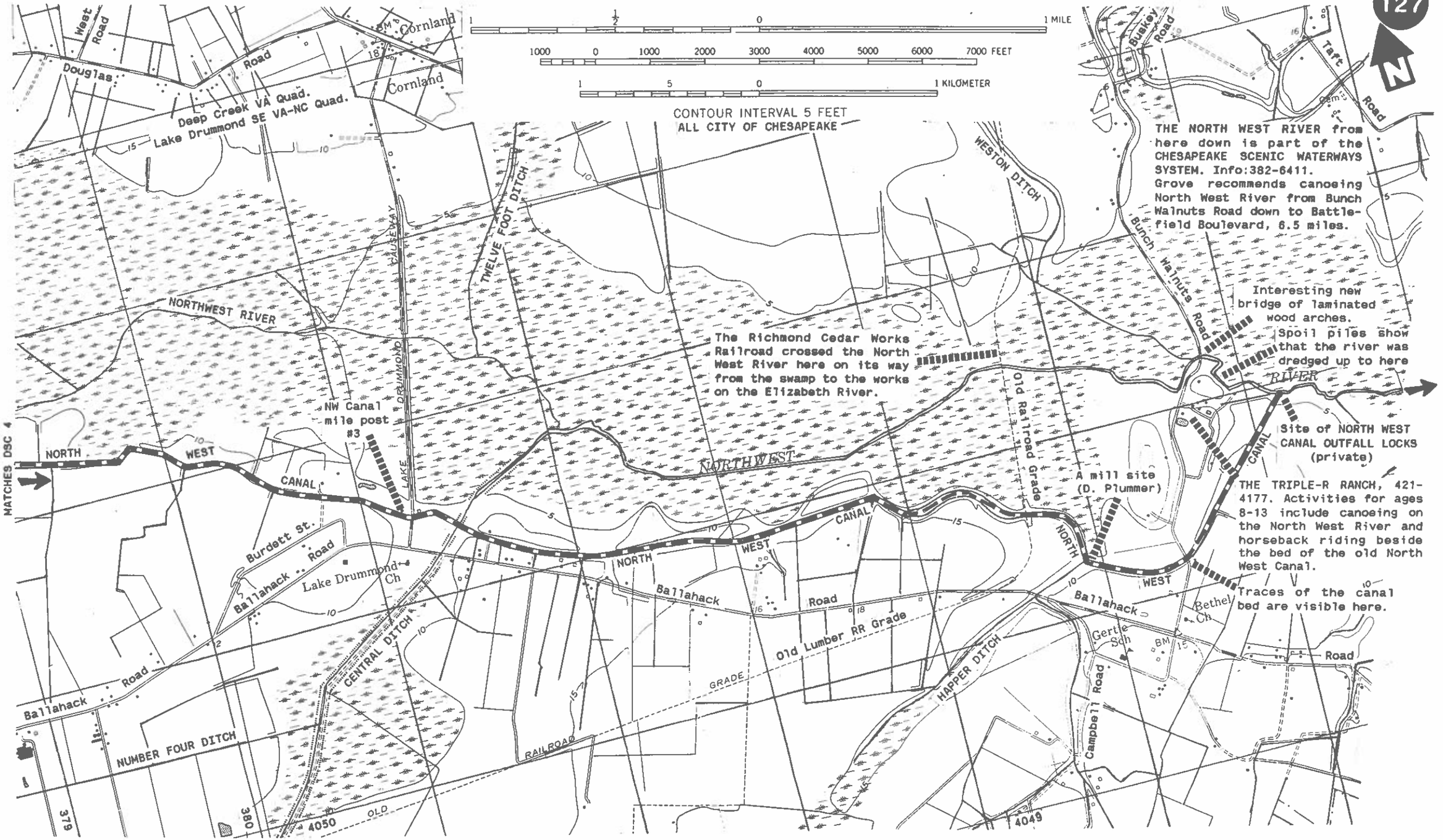
The original Dismal Swamp Canal had wooden locks, then stone ones, and now wood and steel ones. The only wooden locks left in the swamp, representing the canal's earliest stage, are on the North-West Canal. The canal and its locks are worth serious archaeological study.

The North West Canal in 1983, looking west at the site of the Tazewell Lock. Part of it is still preserved underground.

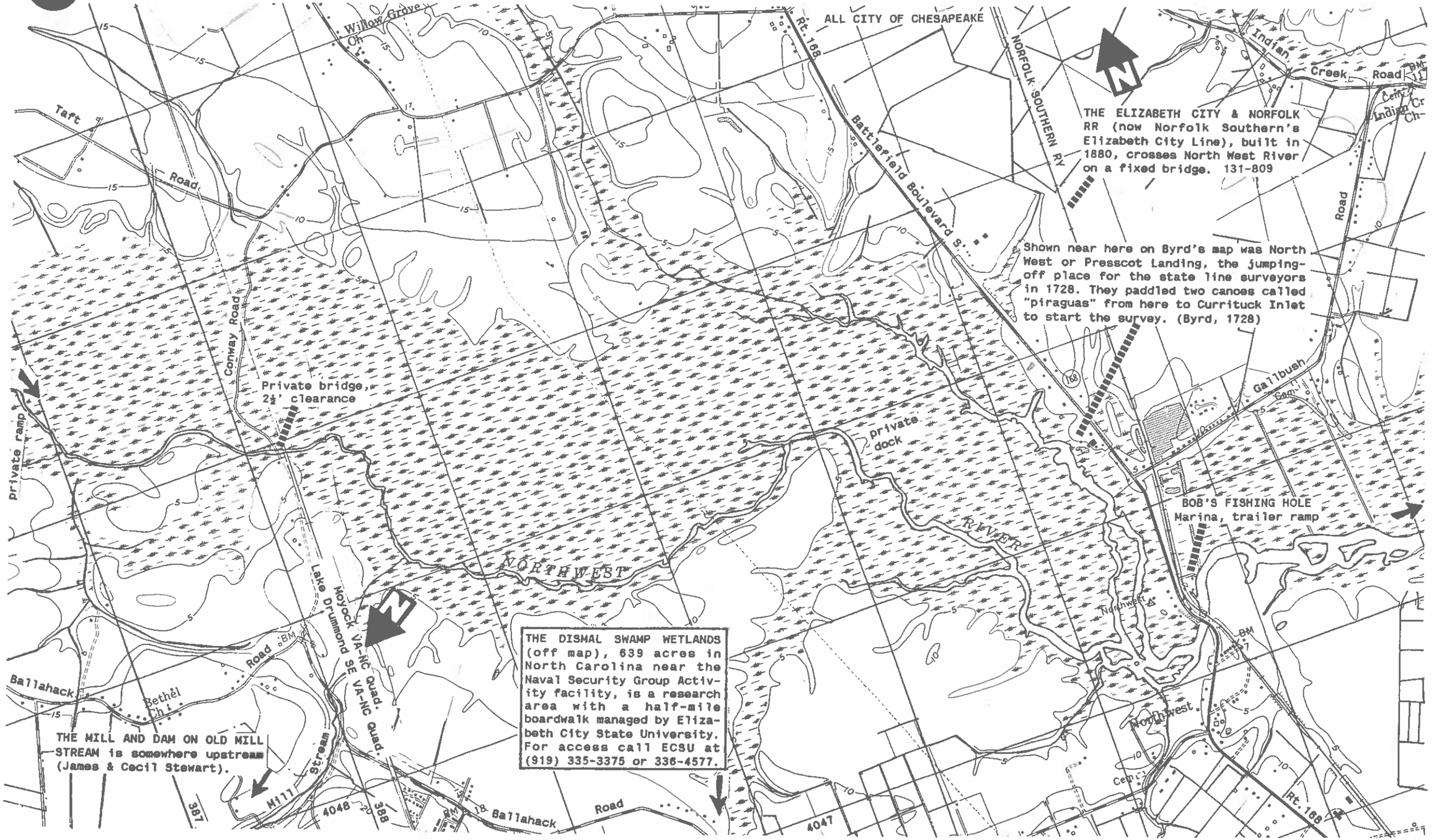

THIS MAP SECTION HAS BEEN COPIED FROM THE WALLACETON PAGE
OVERLAPS PAGE 58
Picnic Area
BM
US 17
Great
Dismal Swamp Canal
MP 6
MP 5
MP 4
Douglas
Road
Deep Creek VA Quad.
Lake Drummond SE VA-NC Quad.
ALL CITY OF CHESAPEAKE
Lake Drummond NW VA Quad.
Lake Drummond VA-NC Quad.
Wild Horse Ridge
NW Canal
Mile Post 1
Northwest River
NORTH WEST CANAL 131-36
NORTHWEST CANAL
Dismal
4053
4052
375
376
Glencoe Road
DSC mile 20
WALLACETON
Belle Haven Street
Lake Drummond SE VA-NC Quad.
Lake Drummond VA-NC Quad.
Follow U.S.17
PUBLIC BOAT RAMP (City of Chesapeake)
Rolling bridge
Ballahack Road
Ballahack
Road
THE NORTHWEST LOCK, one of the Dismal Swamp Canal's 1820's stone locks, was removed (completely?) in the great enlargement of the 1890's. A SAWMILL and other buildings were located on the west bank of the canal.
WALLACE'S CULVERT, built by the Wallaces to drain DOVER FARM's lands into the Northwest River, was the only culvert ever built under the Dismal Swamp Canal.
The Superintendent's House
The Wallace Homestead
Mouth of North West Canal
WALLACETON HISTORIC AREA:
SITE OF GLENCOE, 1841-1870's, home of the Wallaces, one of the famous early families farming the swamp. It is featured in GLENCOE DIARY: THE WAR-TIME JOURNAL OF ELIZABETH CURTIS WALLACE (Norfolk County Historical Society of Chesapeake).
SITE OF THE TAZEWELL (or NORTH-WEST CANAL) LOCK, 1830. Some of the floor of this wooden lock is still preserved underground. The North-West Canal is now only a ditch beside Glencoe Road, but east of the lock (private) it is still a scenic waterway.
OVERLAPS PAGE 58

THE NORTH WEST CANAL

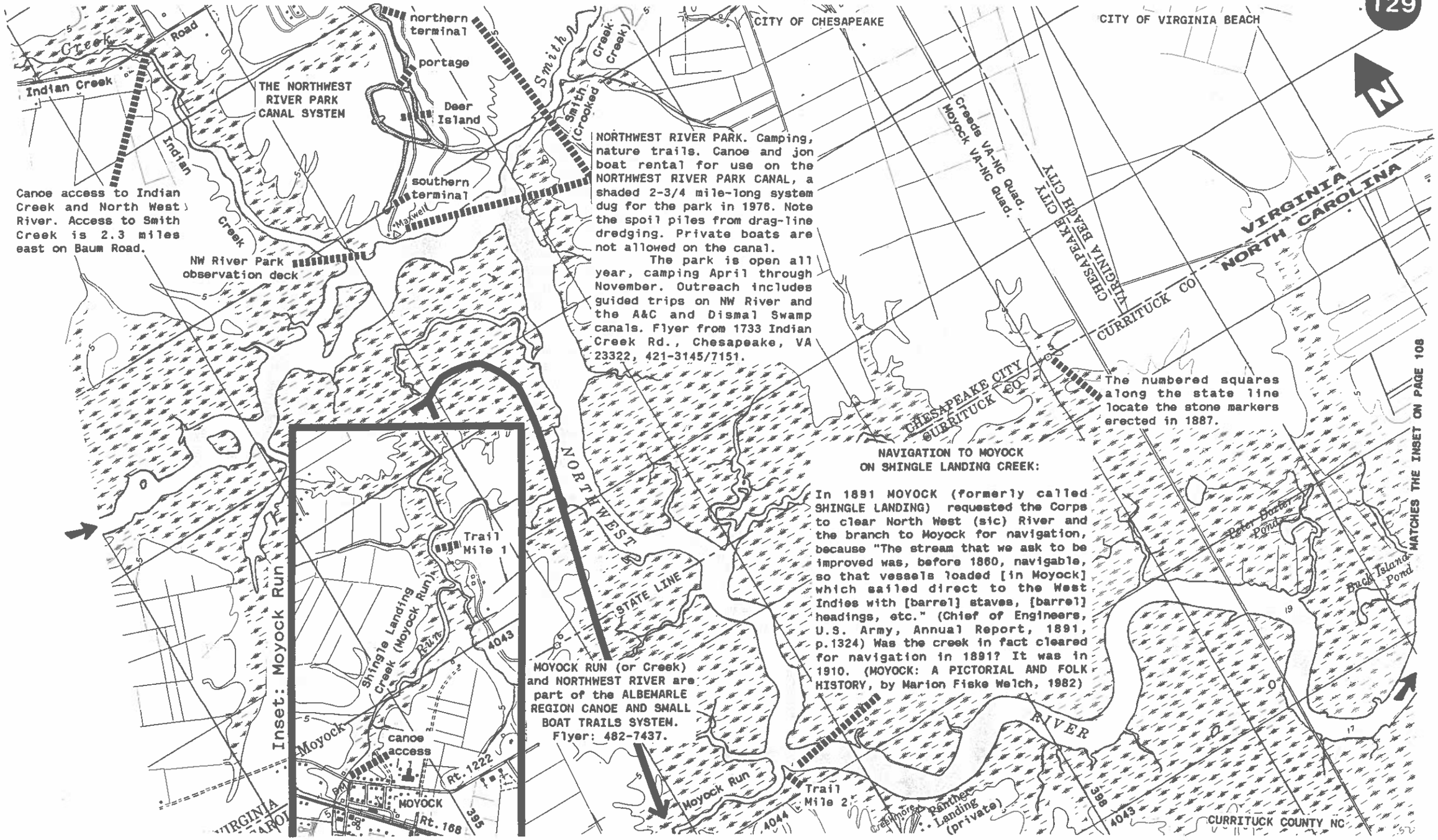
127


1 ½ 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 5 0 1 KILOMETER
CONTOUR INTERVAL 5 FEET
ALL CITY OF CHESAPEAKE
N
West Road
Douglas Road
Deep Creek VA Quad.
Lake Drummond SE VA-NC Quad.
Cornland
BM
Cornland
Guskey Road
Taft Road
THE NORTH WEST RIVER from here down is part of the CHESAPEAKE SCENIC WATERWAYS SYSTEM. Info:382-6411.
Grove recommends canoeing North West River from Bunch Walnuts Road down to Battlefield Boulevard, 6.5 miles.
WESTON DITCH
TWELVE FOOT DITCH
CAUSEWAY
LAKE DRUMMOND
NORTHWEST RIVER
Bunch Walnuts Road
Interesting new bridge of laminated wood arches.
Spoil piles show that the river was dredged up to here
RIVER
The Richmond Cedar Works Railroad crossed the North West River here on its way from the swamp to the works on the Elizabeth River.
Old Railroad Grade
NW Canal mile post #3
MATCHES DSC 4
NORTH WEST CANAL
NORTHWEST
A mill site (D. Plummer)
Site of NORTH WEST CANAL OUTFALL LOCKS (private)
THE TRIPLE-R RANCH, 421-4177. Activities for ages 8-13 include canoeing on the North West River and horseback riding beside the bed of the old North West Canal.
Traces of the canal bed are visible here.
Burdett St.
Ballahack Road
Lake Drummond Ch
Ballahack Road
Old Lumber RR Grade
GRADE
Bethel Ch
Gertie Sch
Road
CENTRAL DITCH
HAPPER DITCH
Campbell Road
NUMBER FOUR DITCH
RAILROAD
OLD
4050
4049
379
380

128 TOWN OF NORTHWEST


ALL CITY OF CHESAPEAKE
Rt. 168
Battlefield Boulevard S.
NORFOLK SOUTHERN RY
Willow Grove Ch.
Taft Road
Conway Road
Private bridge, 2½' clearance
private ramp
private dock
NORTHWEST RIVER
Lake Drummond SE VA-NC Quad.
Moyock VA-NC Quad.
Ballahack Road
Bethel Ch.
Mill Stream
387
388
4048
4047
Indian Creek
Gallbush
Northwest
Cem.
BM
THE ELIZABETH CITY & NORFOLK RR (now Norfolk Southern's Elizabeth City Line), built in 1880, crosses North West River on a fixed bridge. 131-809
Shown near here on Byrd's map was North West or Presscot Landing, the jumping-off place for the state line surveyors in 1728. They paddled two canoes called "piraguas" from here to Currituck Inlet to start the survey. (Byrd, 1728)
BOB'S FISHING HOLE
Marina, trailer ramp
THE DISMAL SWAMP WETLANDS (off map), 639 acres in North Carolina near the Naval Security Group Activity facility, is a research area with a half-mile boardwalk managed by Elizabeth City State University. For access call ECSU at (919) 335-3375 or 336-4577.
THE MILL AND DAM ON OLD MILL STREAM is somewhere upstream (James & Cecil Stewart).

NORTHWEST RIVER PARK


CITY OF CHESAPEAKE
CITY OF VIRGINIA BEACH
N
Indian Creek Road
Indian Creek
THE NORTHWEST RIVER PARK CANAL SYSTEM
northern terminal
portage
Deer Island
southern terminal
Maxwell
Smith Creek (Crooked Creek)
Creeds VA-NC Quad.
Moyock VA-NC Quad.
CHESAPEAKE CITY
VIRGINIA BEACH CITY
VIRGINIA
NORTH CAROLINA
CURRITUCK CO
Canoe access to Indian Creek and North West River. Access to Smith Creek is 2.3 miles east on Baum Road.
NW River Park observation deck
NORTHWEST RIVER PARK. Camping, nature trails. Canoe and jon boat rental for use on the NORTHWEST RIVER PARK CANAL, a shaded 2-3/4 mile-long system dug for the park in 1976. Note the spoil piles from drag-line dredging. Private boats are not allowed on the canal.
The park is open all year, camping April through November. Outreach includes guided trips on NW River and the A&C and Dismal Swamp canals. Flyer from 1733 Indian Creek Rd., Chesapeake, VA 23322, 421-3145/7151.
The numbered squares along the state line locate the stone markers erected in 1887.
CHESAPEAKE CITY
CURRITUCK CO
NAVIGATION TO MOYOCK ON SHINGLE LANDING CREEK:
In 1891 MOYOCK (formerly called SHINGLE LANDING) requested the Corps to clear North West (sic) River and the branch to Moyock for navigation, because "The stream that we ask to be improved was, before 1860, navigable, so that vessels loaded [in Moyock] which sailed direct to the West Indies with [barrel] staves, [barrel] headings, etc." (Chief of Engineers, U.S. Army, Annual Report, 1891, p.1324) Was the creek in fact cleared for navigation in 1891? It was in 1910. (MOYOCK: A PICTORIAL AND FOLK HISTORY, by Marion Fiske Welch, 1982)
Inset: Moyock Run
Trail Mile 1
Shingle Landing Creek (Moyock Run)
4043
Moyock
canoe access
Rt. 1222
Rt. 168
MOYOCK
395
NORTHWEST
STATE LINE
MOYOCK RUN (or Creek) and NORTHWEST RIVER are part of the ALBEMARLE REGION CANOE AND SMALL BOAT TRAILS SYSTEM. Flyer: 482-7437.
Moyock Run
Trail Mile 2
4044
Creekmore
Panther Landing (private)
RIVER
4043
CURRITUCK COUNTY NC
Peter Dexter Pond
Buck Island Pond
MATCHES THE INSET ON PAGE 108

130

The North West Canal: The Dismal Swamp's "Gateway to the Sea"

Branching eastward from the middle of the Dismal Swamp Canal at Wallaceton, the North-West Canal - also known as the "Little Canal" [1] - was a branch line to the seaward swamplands, Currituck Sound, and the sea itself. Although part of its function was to "draw the trade" of these regions, it was built primarily to expand the lumber-gathering capabilities of the Dismal Swamp Canal.

It began in 1820 as a waste ditch 1¼ (or perhaps three) miles long, and 12 feet wide from the Dismal Swamp Canal down into the North-West River. Apparently it was not then suitable for boat traffic, because it had no locks to overcome the drop in water level, but it could be used to transport timber to the main canal.[2]

In 1818 the Dismal Swamp Canal Company was authorized by the Virginia General Assembly "to open a communication between the [Dismal Swamp] Canal and the nearest navigable part of North-west river, either by clearing out the river or by a Canal."[3] Nearly ten years later, after the company had completed a rejuvenation of the Dismal Swamp Canal and had time and funds available, work began in 1827 on the North-West Canal - a proper canal with locks - permitting easy passage of lumber flatboats and other small to medium craft. Henry Garrett was superintendent of the Dismal Swamp Canal at that time and had the honor of digging the first spadeful of dirt at the opening ceremony.[4]

By the end of 1828 about 1600 yards was completed and two miles partially excavated, with three miles still to go. While the canal was under construction, a visitor wrote this account in the Dec. 12, 1829 issue of NILES' WEEKLY REGISTER:[5]

> We pursued our journey along the [Dismal Swamp] canal 11 miles, over a road that McAdam himself could not improve, when we came to the junction of the North-West canal, the cutting of which is now in active progress. This canal connects North-West river (which empties into Currituck sound, in North Carolina), with the main canal, requiring a cut of six miles, and will open an avenue to market for the vast stores of timber in that section, so important for naval purposes, besides the various other products of the country. We traced the whole line of this new work to its outfall at N.W. river, commencing at which, two miles of the canal have been cut, 24 feet in width, to contain 4 feet water; beyond this there remains about a mile to cut entire, at the end of which space commences the old waste ditch of the D.S. canal, 12 feet wide, which will be followed and enlarged to the proper dimensions; this continues 2¼ miles further to the locks, from which [to] the main [i.e. Dismal Swamp] canal, about three quarters of a mile, the cutting is complete. There are now 240 hands employed on this canal, and the work that has been done is highly creditable to the directors of the company, and those who have had the immediate superintendence of it. The work is expected to be finished and in operation by the 1st of July next.

In 1830 the canal was declared complete by the company,[6] but it may not have been until 1832 that water was finally let into the line and the North-West Canal began life.[7]

In its annual report for 1833 the Dismal Swamp Canal Company reported the following items transported on the North-West Canal:[8]

> 17,776 cubic feet of mast timber, 150,311 cubic feet of other timber, 5,773 cubic feet of plank and scantling, 737,333 hogshead staves, 455,538 long shingles, 94,775 two feet shingles, 1,224,453 building shingles, 405 cords of wood, 32,470 bushels of corn. Producing in tolls $1,029.97

From its junction with the Dismal Swamp Canal at Wallaceton, 1¼ miles north of the Lake Drummond Feeder, the North-West Canal proceeded almost directly east as a channel formed by embankments above ground level, holding a ribbon of water 24 feet wide at the surface, four feet deep, and seven miles

---

1. Charles A. Stewart, extracts from MY STORY, Mariners Museum, Newport News, 1947, cited by Brown, DSC, p.80. The canal company and other sources consistently referred to the "North-West," "North-west" or North West (not Northwest) Canal and River, so we shall also do so.

2. VA House Journal, 1820, Appendix i, says 1¼ miles. A description of the canal under construction, in NILES' WEEKLY REGISTER, V.37, p.245 (Dec. 12, 1829), says the waste ditch was about three miles long; the Norfolk HERALD, Nov. 11, 1829, also says three miles. (From John E. Emmerson, Jr., collected clippings and notes on the Dismal Swamp Canal, 1796-1848, Portsmouth, 1956, in the Mariners Museum.)

3. 13th BPW Report, Dismal Swamp Canal Company (DSC Co.), p.433 (1828). A misprint puts the authorization date as 1828, but it was actually 1818 (see Brown, DSC, p.50).

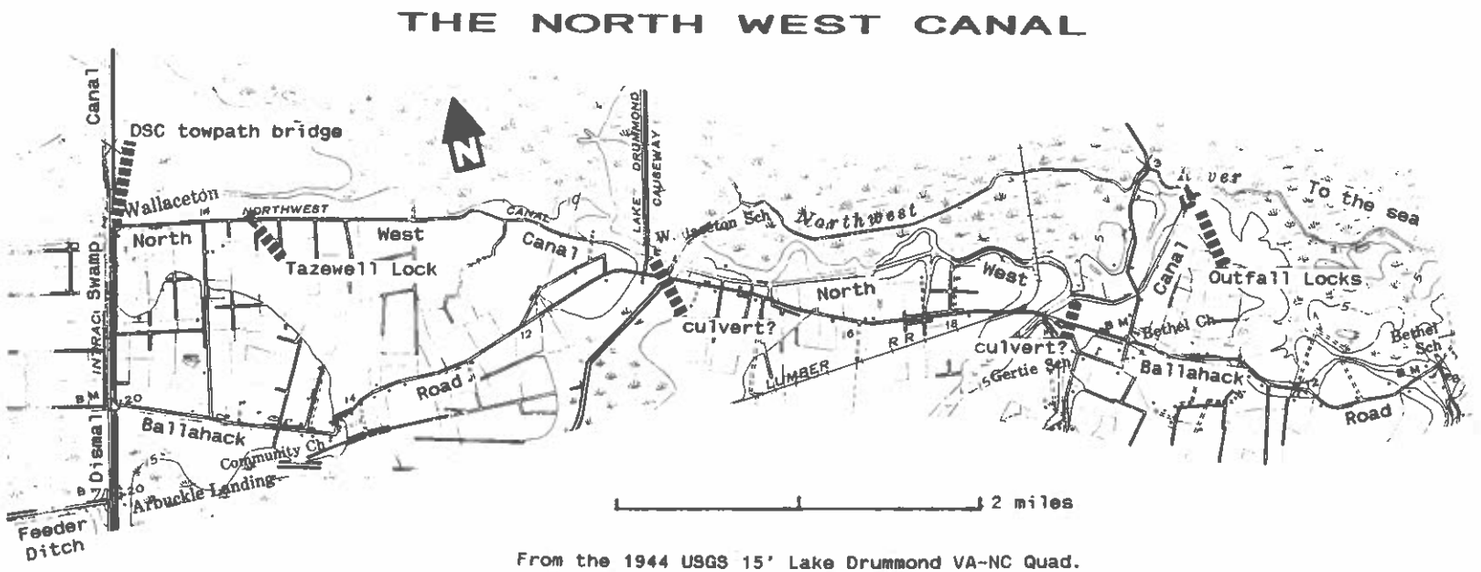
4. As recalled by Mr. Garrett's daughter in Charles A. Stewart's typescript from "My Story", courtesy of A.C. Brown.

5. NILES' WEEKLY REGISTER, V.37, p.245, for Dec. 12, 1829 (Huntington Library). Note that the description of the NW Canal starts at the outlet (east) end and works "backwards."

6. 15th BPW Report, DSC Co., p.184(?)(1830).

7. The NORFOLK BEACON of March 23, 1831 reported that the canal would be open the next year (Emmerson, 1956).

8. 18th BPW Report, DSC Co., p.163 (1833).



From the 1944 USGS 15' Lake Drummond VA-NC Quad.

long.[9] Considerable remains of the canal bed and embankments have persisted to the present day.

Although early plans called for at least one stone lock on the North-West Canal,[10] the locks were probably all built of swamp timber; so was the canal's other architectural feature, a culvert taking the canal over a stream near the Lake Drummond Causeway. None of these wooden structures are now visible aboveground, but foundations and walls are preserved belowground, and the canal's Lower Outfall Lock, half covered by the waters of the North-West River, is one of the best preserved wooden locks in America. The earliest locks on the Dismal Swamp Canal's main line were all of wood, but they have all been completely removed as far as we know. This makes the three locks on the North-West Canal the only surving wooden locks in the Dismal Swamp region, and valuable time capsules of construction techniques on the early Dismal Swamp Canal system nearly two centuries ago.

According to the Norfolk BEACON the North-West Canal's locks were "constructed of the most durable materials, and in the most solid and substantial manner."[11] There were three locks on the canal. The first was 0.8 mile[12] east of its junction with the Dismal Swamp Canal. Completed in 1830, it was variously called the "Western Lock,"[13] the "Upper Lock"[14] the "Tazewell Lock," and the "North-West Canal Lock,"[15] not to be confused with the North-West Lock on the DSC main line nearby. Nothing remains aboveground of this lock today, but the timber foundations have been found underground at the location predicted by the Wallaces, who have lived there at Wallaceton for generations.

The other two locks were seven miles away at the other end of the canal. Called the "Outfall Locks," they lowered boats from the canal down into the North-West River, in two stages with a basin inbetween. The site of the Upper Outfall Lock is now a deep trench; the wooden sides are gone but the floor and foundations are probably preserved underground. However, the Lower Outfall Lock, which lowered boats directly into the North-West River, has been over half submerged since it was built, so this half (below the normal water level) is perfectly preserved, complete with large iron spikes which held the timbers together. We measured the lock in 1983 and found that the lock was 149 feet long overall, with a chamber capable of handling boats up to 10'11" wide and 109 feet long, probably including the "Pickle Barrel Boat" discovered by Carl Cahill on Smith Creek, a tributary of the North-West River.

To maintain the locks and assist in locking through, there were two lockkeepers (probably each with an inexpensive lockkeeper's house), one at Tazewell Lock, and one at the Outfall Locks. There also seems to have been a Keeper of the Culvert, Mr. Sykes.[16] Perhaps the keepers also served as towpath walkers, searching for leaks in the canal banks.

Although used primarily for timber gathering, the North-West Canal had several other functions which had encouraged its construction. Because its water supply came from the Dismal Swamp Canal, it was a handy drain to lower or empty the DSC for repairs.[17] Secondly, it was in actual fact a route to the Atlantic Ocean, while Currituck Inlet was open. But the size of the canal locks would have limited such voyages to boats less than 109 feet long, 12' wide and about 3 feet of draft.

It is sad to relate that after 1837, only six years after the opening of the North-West Canal, any visions of the canal as a Gateway to the Atlantic were severely hampered by the disappearance of Currituck Inlet under the shifting sand dunes.[18] This inlet had been unstable even in William Byrd's time a century earlier,[19] but this time it closed permanently. The closing of the inlet and the subsequent change in Currituck Sound from brackish water to fresh was probably the fault of the Dismal Swamp Canal itself, because it shunted fresh water north and south which would have naturally flowed east, scouring a path through the coastal sandbars.[20]

The opening to the sea was closed, but boats from the North-West Canal could still go south into Albemarle Sound, where the DSC also went. Therefore the North-West Canal was considered a potentially valuable alternate route for Dismal Swamp Canal traffic, in case the DSC became obstructed south of Wallaceton.[21] The North-West Canal was also the lifeline of the shingle cutters and other denizens of Currituck Sound and the eastern Dismal Swamp. To these people, at least, the canal must have been quite valuable, regardless of the company's statement that when Currituck Inlet closed, the canal was no longer profitable or needed.[22]

The lifetime of the North-West Canal was some thirty years. During all that time it had to be constantly maintained and manned - and at least once, during a drought in 1844, it was cleared and repaired.[23] Its death-blows were neglect during the Civil War, and the economies necessary afterward. By 1867 the culvert and outfall locks were no longer in use,[24] and in 1871 the entrance at Wallaceton was blocked forever by a dam, constructed during a dry year to save Dismal Swamp Canal water. So ended the North-West Canal, the Dismal Swamp's link with the sea, as "a fruitful field of complaint from adjacent land-holders."[25]

Today the North-West Canal is nearly dry but reasonably intact. Its route can still be followed, with great difficulty (and through private property), from end to end through fields, woods and swamp. At the canal's western end, Glencoe Road follows it for half a mile, but the canal there has been reduced to a narrow ditch. To the east of the Tazewell Lock a section of the canal is watered, probably appearing much as it was in its heyday. At the canal's eastern end, visitors to the Triple-R Ranch can follow it along a canalside trail by foot, horseback and hayride. The Triple-R has carefully protected its part of the canal, and the Outfall Locks, as a important archaeological and historic resources.

Someday these wooden locks, time capsules from the Dismal Swamp Canal's early days, will be studied archaeologically to tell us how they were made and used. And someday, perhaps, local folks will clear a wilderness trail along the entire seven miles of towpath, winding alongside the historic North-West River, adding the North-West Canal to the extensive trail network beside the ditches of the Great Dismal Swamp.

---

9. Norfolk HERALD, Nov. 11, 1829 (Emmerson, 1956).

10. The Dec. 18, 1826 Norfolk HERALD announced plans to build a stone lock on the canal (Emmerson 1956).

11. Norfolk BEACON, March 23, 1831 (Emmerson, 1956).

12. The Norfolk HERALD for Nov. 11, 1829 says 3/4 mile; that for Jan. 27, 1830 says 1/2 mile (Emmerson, 1956). Our measurements in 1997 put it at 0.8 mile from the Dismal Swamp Canal.

13. Norfolk HERALD, Jan. 27, 1830 (Emmerson, 1956).

14. 18th BPW Report, DSC Co., p.162 (1833).

15. 30th BPW Report, DSC Co., p.24 (1845), refers to "Tazewell lock on the Northwest Canal," but before this it refers to the Northwest Canal Lock.

16. 34th BPW Report, DSC Co., p.181 (1849).

17. 13th BPW Report, DSC Co., p.432+ (1828).

18. 22nd BPW Report, DSC Co., p.113 (1837). New Currituck Inlet opened in 1713 and shoaled in 1828. See Hennigar, H.F. (1977), "A brief history of Currituck Spit," in COASTAL PROCESSES AND RESULTING FORMS OF SEDIMENT ACCUMULATION, V. Goldsmith (Ed.), Virginia Institute of Marine Science, pp.3-1 to 3-21.

19. William Byrd, A HISTORY OF THE DIVIDING LINE, from A JOURNEY TO THE LAND OF EDEN AND OTHER PAPERS, Mark Van Doren, Ed., Vanguard Press, 1928, p.34. Byrd was the one who said, "Because I detested idleness, I caused my overseer to paddle me up the river..." (p.275).

20. William S. Forrest, HISTORICAL AND DESCRIPTIVE SKETCHES OF NORFOLK, Norfolk, 1853, p.467; cited by Brown, DSC.

21. 27th BPW Report, DSC Co. (1842).

22. 22nd BPW Report, DSC Co., p.113 (1837).

23. 29th BPW Report, DSC Co., p.277? (1844).

24. 46th BPW Report, DSC Co., p.167 (1867).

25. 45th Congress, 2nd Session, House Executive Doc. No.19, "Letter from the Secretary of the Treasury in reference to the interests of the Government in the Dismal Swamp Canal, January 21, 1878," containing company reports from 1871 through 1876 and other documents. The 1871 report is quoted. Cited by Brown, p.93.

THE NORTH WEST CANAL OUTFALL LOCKS AS THEY MAY HAVE BEEN IN THEIR PRIME

The eastern end of the North-West Canal has been almost untouched since the canal was abandoned over a century ago. The two locks there, called the Outlet Locks, raised boats and log rafts from the North West River up into the canal.

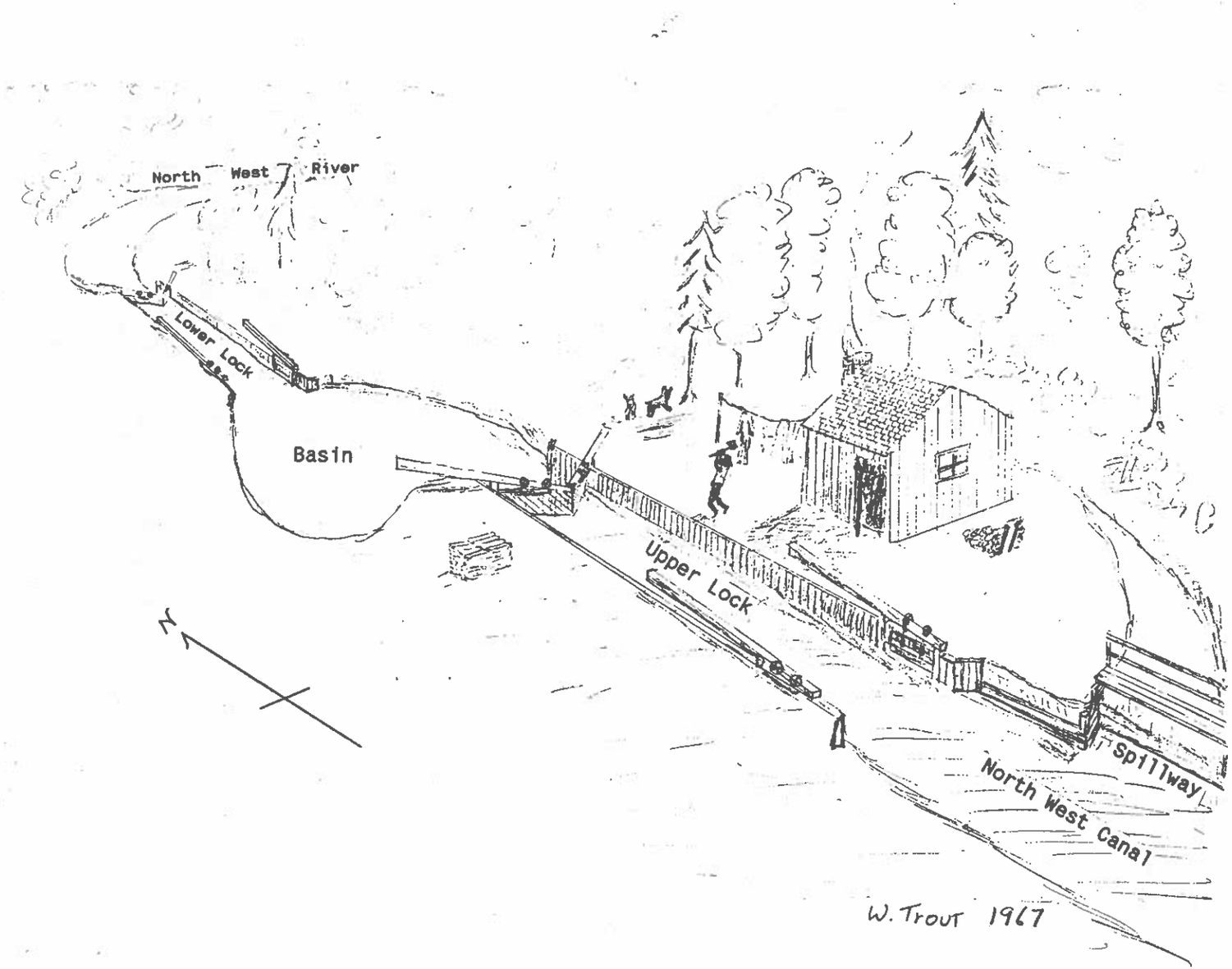
No detailed maps have been found of the North-West Canal and its locks, so what we know about it is based primarily on what we can see. This drawing is an imaginative reconstruction of the site - subject to further information and insight. It would be an ideal site for a proper archaeological investigation.

These were wooden locks so all of the timbers exposed to the air have long since rotted away. There is no water now in the Upper Outlet Lock, so only the floor (and therefore the foundations) and perhaps parts of the walls are still there, preserved underground. But the North West River still backs up into the Lower Outfall Lock, keeping it wet below normal water level. Only the part above water has rotted away. It is the best preserved wooden lock in the Dismal Swamp.

Between the two locks was clearly a basin. Here boats and log rafts could pass each other or wait to lock through. The basin also was a reservoir to supply water to the Lower Lock.

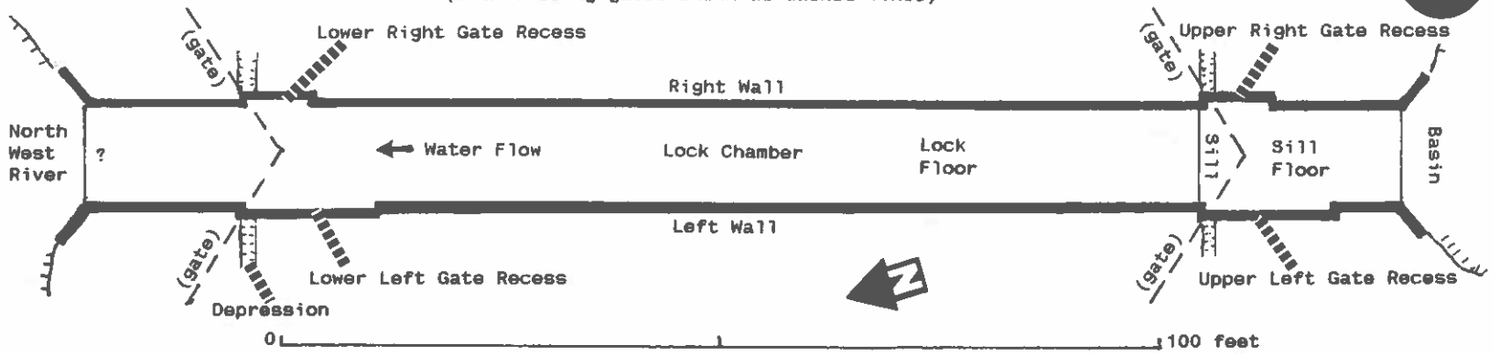
Upstream of the Upper Lock is a ditch which probably served as an overflow, taking care of excess water in the canal.

Somewhere at the locks was a lockhouse. The one shown is a guess; no house site has yet been located.



A PRELIMINARY STUDY OF THE LOWER OUTFALL LOCK

THE NORTH WEST CANAL LOWER OUTFALL LOCK, FROM PRELIMINARY MEASUREMENTS
(With missing gates shown as dashed lines)



Just as the Gilmerton Lock is the sole stone lock remaining in the Dismal Swamp, the North-West Canal Outfall Lock is the only surviving wooden one. By studying both, we can learn more about the Dismal Swamp Canal's early locks.

The first locks on the DSC were wooden, because before the canal was in operation, it was impossible to transport stone to lock sites in the swamp. The swamp was also a rich and handy source of lock timber. During the construction and early years of the Dismal Swamp Canal, an unknown number of wooden locks were built. Some were temporary, and some rotted away and were rebuilt even before the canal was opened. Over the years, as the DSC was rebuilt with stone and then modern locks, the old wooden ones were dredged out or removed, so today there may be no remains of them, even underground.

But on the North-West Canal, built in 1827-1830, the original three wooden locks were never replaced or removed, but were left alone when the canal was abandoned in the 1860s. We know that there are remains underground of the flooring and therefore the foundations of the Tazewell Lock near Wallaceton, and of the canal's Upper Outfall Lock. But it is the canal's Lower Outfall Lock, submerged in the North-West River, which is almost completely intact. It is not buried so one can make a thorough study of the lock chamber by wading around in it.[1]

There is little documentary material on the North-West Canal locks, or indeed, on other wooden locks in Virginia. Even if lock plans are found, they would have to be verified in the field, because too often the published plans were just that; we know, for example, that canal maps do not necessarily agree with what is on the ground, so neither should lock plans. We know from the study of stone locks in Virginia that we should also expect to find quite a variety of wooden locks, differing from each other according to the engineer, contractor, location, and stone and timber resources of the region. What we have discovered so far about the Outfall Lock only confirms the concept that each site, when studied enough, offers its own set of surprises.

All we know of the North-West Canal locks is that they were "constructed of the most durable materials, and in the most solid and substantial manner." They may have been similar (but were presumably more advanced) than the Dismal Swamp Canal locks of 1807, which were 9 feet wide and 75 feet long, of squared Juniper (Atlantic White Cedar) timbers, cost about $300 each and were used by flats 30 or 50 feet by 6 and drawing 18 to 25 inches loaded.[2]

The North-West Canal Outfall lock demands a through investigation, but some preliminary measurement and probing was undertaken on July 13, 1983 with archaeologist Herbert G. Fisher, and Richard A. Davis of the American Canal Society. The lock is 149 feet long overall; the chamber is 10 feet 11" wide and 109 feet long from upper to lower gate post - making it suitable for log rafts or boats up to 10½ feet wide and about 100 feet long.[3] This makes it an extraordinarly long chamber for its width. But when these locks were built, the Dismal Swamp Canal locks had just been enlarged, with stone locks for boats up to 22 feet wide and 100 feet long. Our assumption now is that the North-West Canal locks were half the width of those on the DSC, so that log rafts (or boats) from the North-West River could pass two abreast through the DSC.[4]

There is a depression in the ground opposite each of the four gate posts, at right angles to the lock; these are also visible at the upper Outfall Lock. It is probable that there were tie-back timbers here which have rotted away. Such timbers are shown on an engineering drawing for a wooden lock for the Washington Canal on the Potomac, made in 1810 by Benjamin Henry Latrobe.[5] Other similarities to Latrobe's drawing are the wooden wing walls at both ends of the lock, extending at 45-degree angles; and the location of the lock sill (the "step" in the lock) - making the upper lock gates shorter than the lower ones.

However, there are significant differences between the lock and Latrobe's drawing. Latrobe shows spaced vertical timbers lining the chamber, with horizontal plank backing, whereas the Outfall Lock is lined with horizontal timbers about 6" square - presumably of Juniper.

Also, the gate recesses (where the lock gates swung back when open) are unusual and puzzling. The lower (and probably the upper) right gate recesses are of the expected length, about seven feet (7' 4") for one of a pair of miter gates spanning an 11' wide lock. However, the lower (and probably the upper) left recesses are about twice this length, 14' 4". What are these long recesses for? Did they house openings in the lock wall for underground sluices, to fill and drain the lock?

The lift - the distance from the sill to the floor, representing the distance the lock can raise or lower boats - is probably 2'10" for the Lower Outfall Lock - a low lift compared to most locks. That of the Tazewell Lock seems to be about two feet. The lift of the Upper Outfall Lock is still to be determined.

None of the lock gates have so far been located, but it is possible that the bottoms of some have been preserved, or that some collapsed into the canal. Another important site to look for at the Outfall Locks is the lockhouse.

The North-West Canal locks are clearly worth preservation and further study. The exposed, yet preserved, timbers make this site an invaluable starting point for understanding early wooden lock construction and technology. It is also clear that the site is an important historic site, eligible for the National Register of Historic Places.

---

1. Few wooden locks in this country are as easily studied. One is the outlet lock of the Delaware and Raritan Canal, in the Delaware River in Bordentown, New Jersey. Another is the outfall lock in the Altamaha River, on the Brunswick and Altamaha Canal in Georgia (W.E. Trout, III, The American Canal Guide, Part 2, American Canal Society, 1975, p.8).

2. Tenth Congress, 1st Session, No.34, Roads, Canals, Harbors and Rivers, "Answers to Questions respecting the Dismal Swamp Canal," pp.209-212; also Brown, DSC, 1970, p.46.

3. This agrees with measurements made in 1997 of the Tazewell Lock, by probing into the silt covering the remains of the floor. Its chamber is 10'11" wide, and the lock about 148' long overall. The lift (the drop from the sill to the floor) is probably two feet; the floor is 9' below general ground level.

4. A long, narrow lock for log rafting is known elsewhere; Louisiana's Hanson Canal Lock, of more recent vintage (1907) is 937 feet long but only 26 feet wide. See W.E. Trout, III, The American Canal Guide, Part 3, 1979, p.10.

5. D.H. Stapleton (Ed.) The Engineering Drawings of Benjamin Henry Latrobe, Yale University Press, 1980, pp.130-136.

THE PICKLE BARREL WRECK: A NORTH-WEST CANAL BOAT?

In 1984 writer Carl Cahill tried to save an historic boat wreck in Smith Creek, a branch of the North West River at Northwest River Park. The boat was rotting away, with most of the bow end and sides gone, the rest preserved underwater in the creek. The plan was to float the boat off with 55-gallon plastic pickle barrels to a safe place in the river, where it could be preserved and studied, and eventually be treated with a preservative. The necessary permits were obtained, businesses donated money and equipment, and volunteers came to help. But the boat didn't move. It was too heavy, the volunteers too few, and the resources too small for what came to be a formidable project.

Could the Pickle Barrel Boat have been a North-West Canal boat? Could it fit in the locks? The North West Canal lock chambers, based on measurements of the Lower Outfall Lock, were 10' 11" wide and 100 feet long. The sides of the boat are missing but it could easily have been narrow enough for the locks. It is also probably old enough for the canal which opened in the 1830s and probably closed in the 1860s.

As far as we know, this is the only boat still existing which may have used the Dismal Swamp Canal in its early days. It needs to be studied more thoroughly before it deteriorates any more. And we need to look for more sunken boats in the swamp. Is an early Dismal Swamp Canal boat, or flat, or batteau still out there, sunk in a swamp or backwater? And whatever happened to the "gondola" which carried Porte Crayon and so many other tourists from Suffolk to Lake Drummond, along the Jericho Canal?

Dara Cahill stands on the Pickle Barrel Boat at low water (Photo by Carl Cahill)

DIVERS SEEK TO RAISE OLD CANAL BOAT IN VIRGINIA

by Carl Cahill
(New York Journal Of Commerce, 1984)

An ancient relic of trade in the eastern part of the country lies in a twisting, shallow tributory of the Northwest River in Chesapeake, Va.

Until earlier this year, the relic, a 70-foot-long canal boat, has rested undisturbed in the mud and murky waters. Now three men are at the difficult task of trying to raise it.

In its cargo-hauling days a century and a half ago, the vessel was an anomaly. Most canal boats of that time were only 30 to 40 feet long. Its size on such small waterways make it a type about which little is known.

The decaying bow of the old boat rests on the swampy shore; the remainder is well-preserved under six feet of water. Virginia Beach scuba divers Pat Waddington and Steve Kenneday, assisted by Jim Dyer of Norfolk, work almost entirely by feel in knee-deep muck.

They've been at the boat on weekends for almost two months, putting lines under the hull and bringing up part of what they speculated was a cargo of brick.

But John Broadwater, Virginia's underwater archaeologist who is studying wrecks of French and English ships left from the Battle of Yorktown, examined the canal boat and said the bricks may be part of a hearth or dutchoven that the boatmen used for warmth and cooking as they poled it along eastern rivers.

Mr. Broadwater noted, "The boat was probably around 70 feet long, with rounded bow and square stern. The vessel is heavily built, probably as a cargo carrier, and its size and construction suggests a construction date in the second half of the 19th century."

But Mr. Broadwater, who has dived to the wreck of the Monitor off the North Carolina coast, was unable to

add much more information. "As far as the boat's significance, I have not been able to find evidence of another one like it. It seems to be of a type that we know little about. It seems to be of a type that is not well-documented or represented by archaeological examples."

Structural members — keelsons and frames — are made of heart pine and show almost no decay. The planks are of cypress and those that have remained under water are well-preserved.

Mr. Broadwater later described the vessel to other archaeologists at a meeting in Washington, D.C., and was told it dated back to about 1840. R.E. Keeter who lives near the old boat said it has been at its present location at least since 1931.

None of Chesapeake's historians or old timers know anything else about the craft.

There are, however, mention of such boats in history books. "Scows and flats, propelled by poles, were used extensively and carried large cargoes of freight, especially in the lower regions of eastern rivers," according to a book on North Carolina by Hugh Leffler and J.T. Newsome.

There is a brief description of the boats in "Hotel in the Great Dismal Swamp" by Jesse F. Pugh and Frank T. Williams. "In 1807, the boats in use were flats, 30 to 40 feet long, four to six feet wide and drawing from 18 to 24 inches when loaded."

From the book, "History of Norfolk County:" "And the Northwest River constitutes a very fine water system, and places each farmer in Norfolk County within a few miles of water transportation, insuring to the Norfolk County farmer the cheapest transportation in the world."

Other early accounts relate how farmers in northeastern North Carolina brought their products from Currituck Sound to the Northwest River in canal boats that passed through locks into the Dismal Swamp Canal and were poled into Norfolk.

Messrs. Waddington, Kenneday and Dyer hope to use about 20 empty plastic pickle barrels to float the boat to the surface and downstream to Northwest River Park, a city-owned facility, where it will be put on display.

Their project has been dubbed "The Pickel Barrel Expedition."

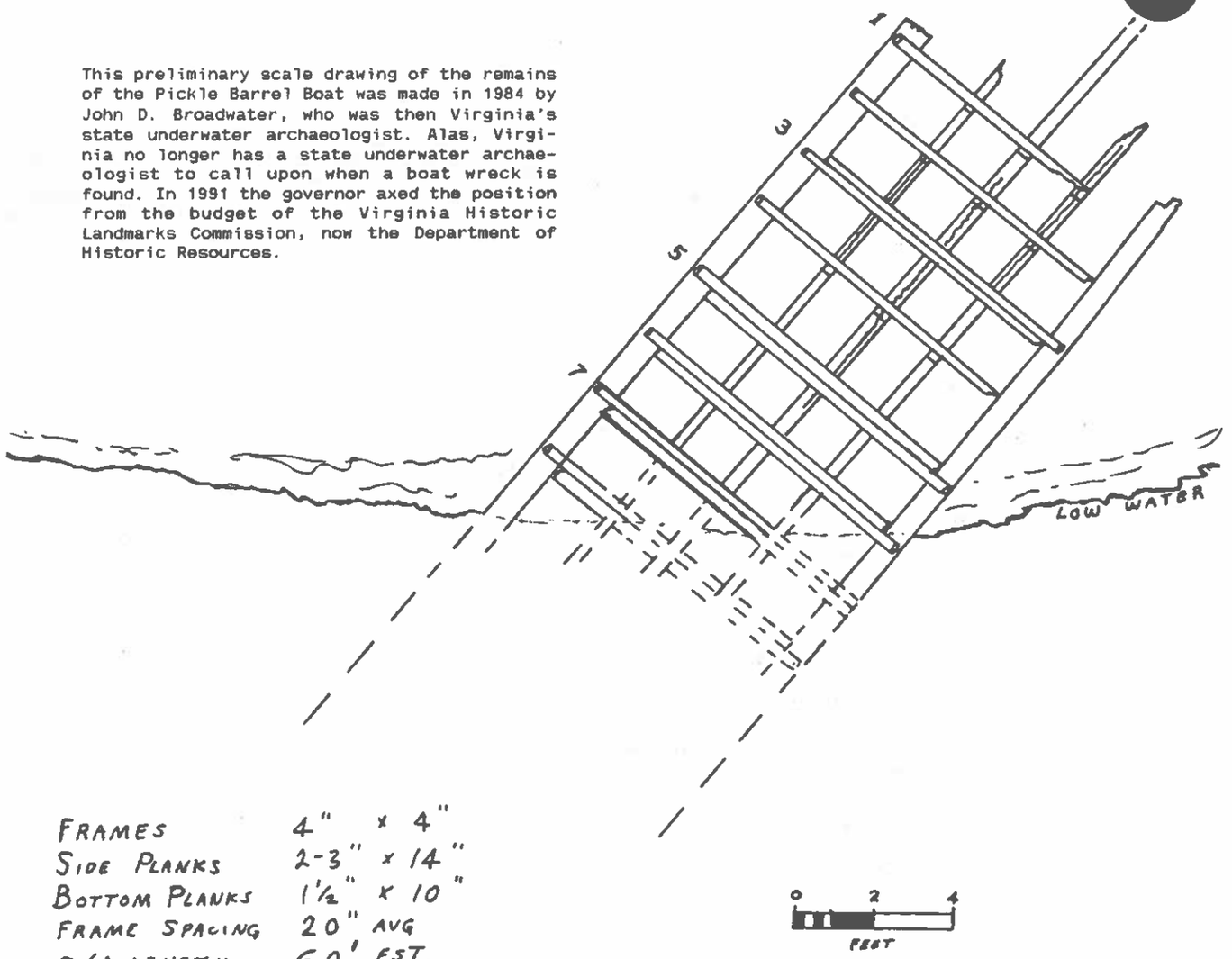
One of their concerns is how to preserve the boat for future generations. The Cousteau Society suggested they soak it in boric acid. Texas A&M University knows of a process using brown sugar. William Trout III, president of the Virginia Cana/ Society, wants to use polyethylene glycol to preserve it.

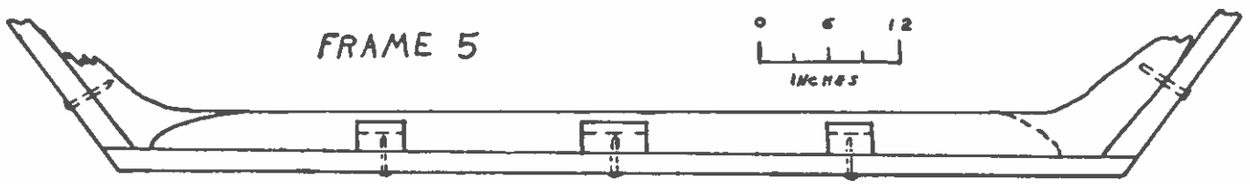
But first, the old boat must be raised. The three-man team doesn't know when that will be.

Meantime, they speculate what it was doing up the tributary, two miles from the Northwest River, the normal route for canal boats moving between Norfolk and North Carolina. Was it poled up the creek simply to be abandoned? Or was it en route to pick up cargo? The answers are not likely to come soon, if at all.

— Carl Cahill

This preliminary scale drawing of the remains of the Pickle Barrel Boat was made in 1984 by John D. Broadwater, who was then Virginia's state underwater archaeologist. Alas, Virginia no longer has a state underwater archaeologist to call upon when a boat wreck is found. In 1991 the governor axed the position from the budget of the Virginia Historic Landmarks Commission, now the Department of Historic Resources.

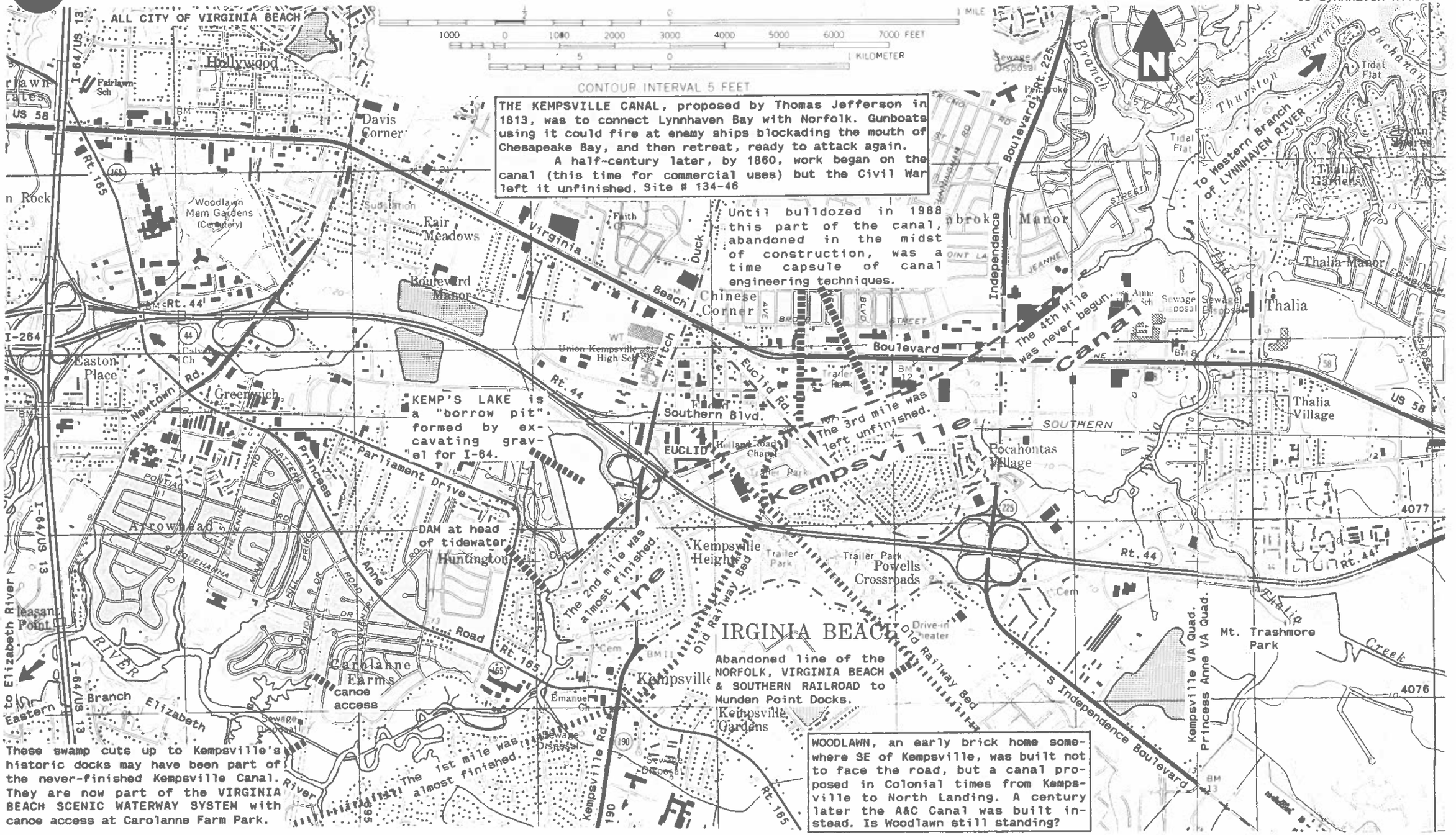




PICKLE BARREL WRECK
3-17-84 J.D. BROADWATER

Sketch courtesy of Carl Cahill

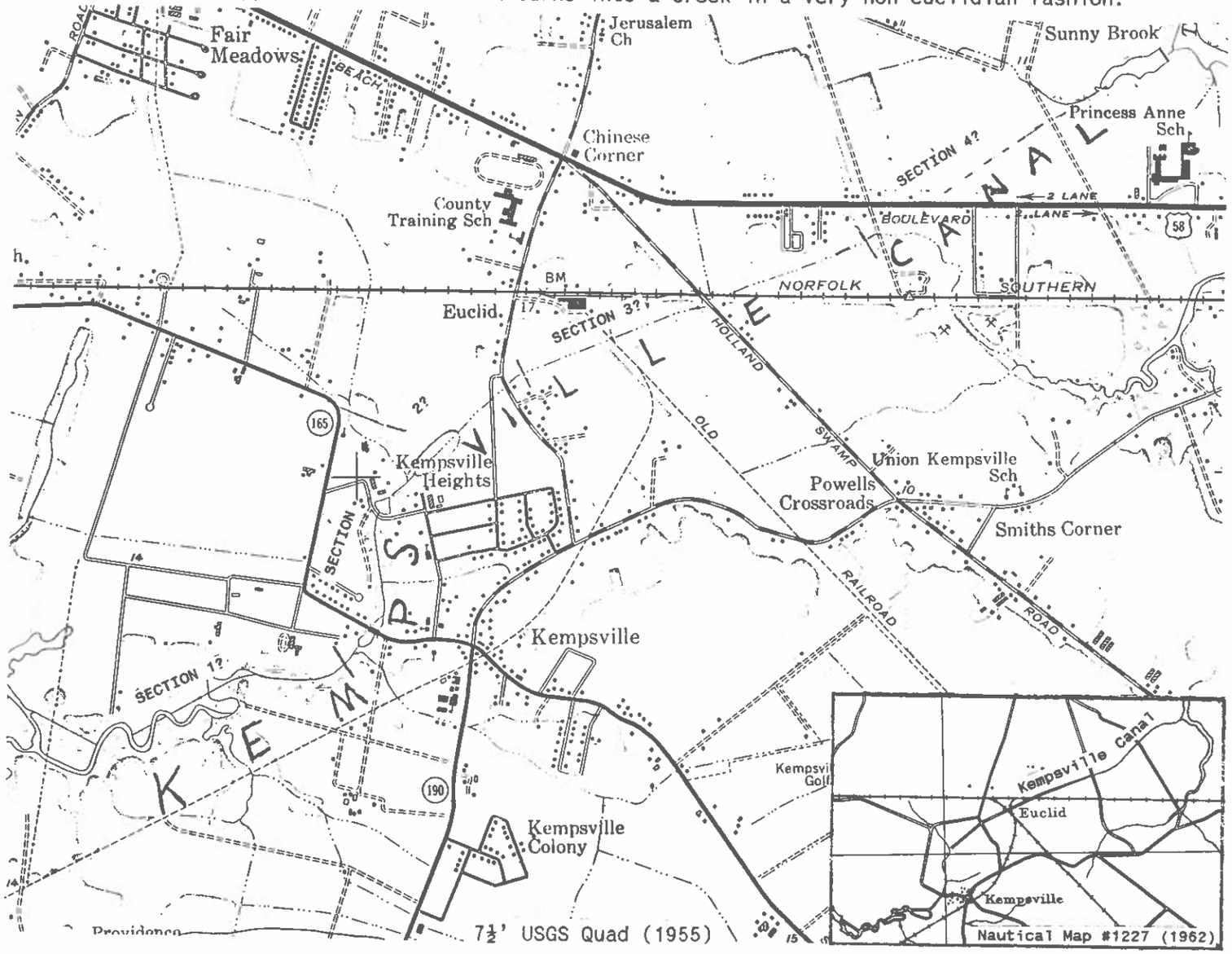
136 THE KEMPSVILLE CANAL


to Lynnhaven River
ALL CITY OF VIRGINIA BEACH
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 0 1 KILOMETER
CONTOUR INTERVAL 5 FEET
THE KEMPSVILLE CANAL, proposed by Thomas Jefferson in 1813, was to connect Lynnhaven Bay with Norfolk. Gunboats using it could fire at enemy ships blockading the mouth of Chesapeake Bay, and then retreat, ready to attack again.
A half-century later, by 1860, work began on the canal (this time for commercial uses) but the Civil War left it unfinished. Site # 134-46
Until bulldozed in 1988 this part of the canal, abandoned in the midst of construction, was a time capsule of canal engineering techniques.
KEMP'S LAKE is a "borrow pit" formed by excavating gravel for I-64.
DAM at head of tidewater
The 1st mile was almost finished.
The 2nd mile was almost finished.
The 3rd mile was left unfinished.
The 4th Mile was never begun.
Kempsville Canal
Abandoned line of the NORFOLK, VIRGINIA BEACH & SOUTHERN RAILROAD to Munden Point Docks.
WOODLAWN, an early brick home somewhere SE of Kempsville, was built not to face the road, but a canal proposed in Colonial times from Kempsville to North Landing. A century later the A&C Canal was built instead. Is Woodlawn still standing?
These swamp cuts up to Kempsville's historic docks may have been part of the never-finished Kempsville Canal. They are now part of the VIRGINIA BEACH SCENIC WATERWAY SYSTEM with canoe access at Carolanne Farm Park.
Hollywood
Davis Corner
Fair Meadows
Boulevard Manor
Chinese Corner
Easton Place
Greenwich
Arrowhead
Carolanne Farms
canoe access
Kempsville Heights
Kempsville
Kempsville Gardens
Powells Crossroads
Pocahontas Village
Thalia Manor
Thalia
Thalia Village
Mt. Trashmore Park
Tidal Flat
Western Branch Lynnhaven River
Western Branch Buchanan
Thurston Branch
Duck Pond Branch
Virginia Beach Boulevard
Independence Boulevard
S Independence Boulevard
Old Railway Bed
Drive-in Theater
Union Kempsville High School
Fairlawn Sch
Woodlawn Mem Gardens (Cemetery)
Princess Anne Quad.
Kempsville VA Quad.
Princess Anne VA Quad.
Rt. 165
Rt. 44
Rt. 225
Rt. 190
US 58
I-64/US 13
I-264
Newtown Rd.
Parliament Drive
Princess Anne Road
Euclid Rd.
Southern Blvd.
Witchduck Rd.
Kempsville Rd.
Elizabeth River
Eastern Branch Elizabeth River
to Elizabeth River
Pleasant Point
Sewage Disposal
Trailer Park
Cem
Emanuel Ch
Holland Road Chapel
4077
4076

THE KEMPSVILLE CANAL IN 1955 AND ON A NAUTICAL MAP

BELOW: The remains of the Kempsville Canal are shown as an intermittent stream (dotted/dashed line) on this 7½' USGS quadrangle map from 1955. The Kempsville area has changed since then!

INSET: The Kempsville Canal route through Euclid is also shown on the US Coast & Geodetic Survey nautical map #1227, "Cape Henry to Currituck Beach Light" (1962), but through a drafting error, it appears as a road which turns into a creek in a very non-euclidian fashion.



The Kempsville Canal: A Canal Construction Time Capsule

If Thomas Jefferson had his way, the Kempsville Canal would have been constructed in 1813. The British had blockaded the entrance to Chesapeake Bay, so he suggested to President Madison that a few gunboats stationed nearby in Lynnhaven Bay could break the blockade. For this to be effective, the gunboats had to have available a "canal of retreat," and Col. Wm. Tatham had already surveyed the route and recommended a canal 30 feet wide, 9 feet deep and six to eight miles long, from Lynnhaven Bay to the Eastern Branch of the Elizabeth River.[1] Jefferson was convinced that this strategic canal would be worth the few month's exertion. With tongue in cheek, he warned Madison not to have the route re-surveyed by Benjamin Latrobe, "who would immediately contemplate a canal of Languedoc"[2] - in other words, an overly sophisticated and expensive project similar to the canal in France which Jefferson had investigated while ambassador there.[3]

Fortunately, the country survived the War of 1812 even though Jefferson's canal was never built. It was not until 1840 that the Princess Anne and Kempsville Canal Company was incorporated with the same route in mind, although the purpose of the canal then was probably more for internal commerce than for gunboats. Claudius Crozet of Virginia's Board of Public Works carried out two surveys for the company, one for a canal from the Eastern Branch of the Elizabeth River, near Kempsville, to Lynnhaven Bay; and another from Kempsville to North Landing.[4]

The canal from Kempsville to North Landing would have been

---

1. Thomas Jefferson to James Madison, May 21, 1813, in Writings of Thomas Jefferson, 13: 232-236, cited by N.L. Peterson in The Defence of Norfolk in 1807 as told by Wm Tatham to Thomas Jefferson, Norfolk County Historical Society of Chesapeake, 1970, p.103. According to Swem 2W(2)82, Col. Tatham wrote an early history of the Dismal Swamp and other canals, which has since been lost. The manuscript may possibly be somewhere around Covington or Lewisburg.

2. Ibid., Thomas Jefferson to James Madison, June 21, 1813, pp.265-268.

3. W.E. Trout, III, "Avec Thomas Jefferson sur le Canal du Midi," American Canals 30, p.5 (August 1979).

4. C.W. Sams, Index to Map of Norfolk and Princess Anne Counties, 1919, in Princess Anne Courthouse. See p.101 and notes by Minton W. Talbot on opposite page. Sams refers to Acts of Assembly 1839-1840, p.69. Crozet's 1840 map of the Kempsville and Princess Anne Canal is listed in "Maps Relating to Virginia" in Bulletin 7 of the Virginia State Library, but a copy has not been found.

for steamboats, rivaling the Dismal Swamp Canal, linking Chesapeake Bay and Albemarle Sound by a cut 60 feet wide, six feet deep, and about seven miles long.[5] This canal had in fact been surveyed over half a century before, in 1774, as an alternative to the route used much later by the Albemarle & Chesapeake Canal.[6] If either of these alternative through routes had been built before 1800, there would probably have been no Dismal Swamp Canal, but rather a network of timber-access canals throughout the swamp. But the American Revolution stopped canal building for a time and in the end, the Albemarle & Chesapeake Canal, not built until 1859, took a route through Great Bridge instead of Kempsville, leaving Kempsville rather far from the Intracoastal Waterway. Curiously enough, although the Kempsville-North Landing canal was never begun, there may still be evidence of it. Minton Talbot was told that the brick homestead known as Woodlawn, south of Kempsville on the east side of the road to Bonney's Corner (Rt.190), was built to face the expected canal, rather than the main road! Is it still standing?[7]

Work Begins on the Kempsville Canal

The canal from Kempsville to Lynnhaven Bay - what we now call the Kempsville Canal - was never finished either, but over two miles of it were completed which still leave an imprint on the landscape. The Princess Anne and Kempsville Canal Company amended its charter several times[8] and re-incorporated in 1851 as the Kempsville Canal Company. This time it concentrated entirely on the canal between Kempsville and Lynnhaven Bay, variously known as the Kempsville and Lynnhaven Canal, the Princess Anne and Kempsville Canal, and the Kempsville Canal. In 1858 the company published its by-laws[9] and finally began some spade work on a four-mile canal with locks. The canal was divided into four one-mile sections. By 1860 the first two sections (presumably those nearest Kempsville) were practically finished, the third had been excavated "three feet throughout," and the fourth section had not been commenced.[10] By 1861, over $17,000 had been expended on excavation, piling, other work, and salaries.[11]

And then the work stopped, because this time the Civil War made the year 1860 a bad time for canal-building! The company's annual report that year optimistically reported that "as soon as the state of the country will permit, we hope to resume the work, with better progress."

Indeed, the company's last report, in 1872,[12] announced that some $4,000 had been spent since 1860 on excavation, bridging and other work; that some funds were still "in hand"; and that books of subscription would be opened to obtain the capital necessary to complete the canal.

But that is the last we hear from the Kempsville Canal Company. Two decades later, in 1890, the route was investigated by the Corps of Engineers, who concluded that the completion of the canal was not economically justifiable. Even by that time they were able to obtain little definite information about the canal; they were told that the company consisted "principally of planters living in the neighborhood of Lynn Haven Bay and Kempsville" and that work had not resumed after the Civil War. The canal route was described as "a ditch varying in width from 30 to 50 feet, whose bottom is about 3 or 4 feet below the country through which it passes, probably 5 or 6 feet above the level of mean low tide at its highest point. It is entirely overgrown with trees and brush, here and there filled with water."[13]

The Kempsville Canal Today

Today almost all of the canal has been obliterated by suburbanization, making a study of it very difficult. No maps are known which show the lock sites or which mark the four one-mile sections. The only surviving section may be in the Eastern Branch of the Elizabeth River, in the tidal reaches west of Kempsville's historic wharf district. This section was described as "almost finished" in 1860. The cuts still show up on modern topo maps, and one can canoe through most of them at high tide. Were all of the cuts made by the canal company?

From the head of tidewater at Kempsville to somewhere near Euclid, the canal was also described as "almost finished" in 1860 but it is unrecognizable today. A modern dam backs up Kemp's Lake against the line of the canal. Is the dam at one of the lock sites?

The Kempsville Canal as a Time Capsule

The third section of the canal was excavated "three feet throughout" as of 1860. West of Euclid Road, only a narrow ditch now remains of the canal, which has probably been filled in. But east of Euclid Road, there remained until 1988 a remarkable section of the canal, about 1000 feet long, which was a unique time capsule of canal engineering techniques.

This 1000-foot section must have been at the head of construction on the canal, because it clearly shows how the canal was being built, over a century ago. It was evidently all done by hand labor, using shovels and wheelbarrows; there is no evidence of horse scrapers, much less steam shovels.

The unfinished section of the Kempsville Canal was unique; there are other unfinished canals in the United States, but such a graphic display of canalbed construction technique has not yet been found anywhere else, and even so, the techniques varied with time and place. The canal company's records tell us little, so the unfinished section was our primary source of information about the construction of the canal. We were fortunate to have recognized the unfinished section for what it was, and to have deciphered some of its message before it was destroyed.

Little remains now of the historic Kempsville Canal. It deserves at least a highway marker.

---

5. 25th Virginia Board of Public Works (BPW) Report, Report of C. Crozet, pp.463-465 (1840).

6. The 1774 survey by Thomas Walker, "Proposed canal from the North Landing to Kempe's Landing" is in folder 53 (Robinson's Estate) Item #50 (oversize), Colonial Papers, LVA. The survey from Great Bridge to North Landing is in Folder 50, Item 23, pt.1-3 of the Colonial Papers and has been reproduced in "The Canal" by Charles B. Cross, Jr., in An Historical Review, Norfolk County Historical Society of Chesapeake, 1966, pp.11-19.

7. Sams.

8. Sams.

9. By-laws of the Kempsville Canal Company, adopted February 3rd 1858. Kempsville, Va. Printed at the Office of the Southern Argus, Norfolk, 1858, 8pp. (Virginia State Library).

10. BPW Report, Kempsville Canal Co. (KC Co.), p.299 (1860).

11. BPW Report, KC Co., p.120 (1861).

12. BPW Report, KC Co., p.141 (1870); dated Jan 20, 1872.

13. "Preliminary Examination of Water-Way to Connect Lynn Haven Bay with Eastern Branch of Elizabeth River, Virginia," Report of the Chief of Engineers, U.S. Army, 1891, pp.1310-1315. A map accompanying the original report, showing the canal route (not quite correctly) but no other canal detail, is "Map of country between Norfolk and Atlantic Ocean showing location of proposed water-way to connect Lynn Haven Bay with Eastern Branch of Elizabeth River, 1890, Map A" National Archives RG77-G430-1. #G430-2 (same title, Map B) shows soundings in Lynnhaven Bay, not connected with the canal. The next map from the Corps collection, #G430-3, is undated and untitled except for "Map B", so it probably comes from another report. This map shows the canal route correctly, and clearly shows the cuts in the Elizabeth River (it is the

Acknowledgements

I would like to thank Herbert G. Fisher, Mrs. Bernard G. Barrow, Mrs. Swindell Pollock, Richard A. Davis, E.L. Woodard, and E. Spencer Wise for help with the Kempsville Canal.

For accounts of our attempts to save the unfinished section of the canal see the articles by Mary Reid Barrow in The [Norfolk] Beacon, "Canal schemes flowed freely for centuries" (December 20, 1987, p.7), and "Researcher maps out roots of old canal" (July 28, 1983, pp.34, 40), reprinted in the December 1983 Tiller.

HOW MEN DUG THE KEMPSVILLE CANAL

East of Euclid Road was a well-preserved section of the Kempsville Canal which must have been at the head of construction because it clearly shows how the canal was being built, over a century ago. It was evidently all done by hand labor, using shovels and wheelbarrows - not by horse scrapers or steam shovels.

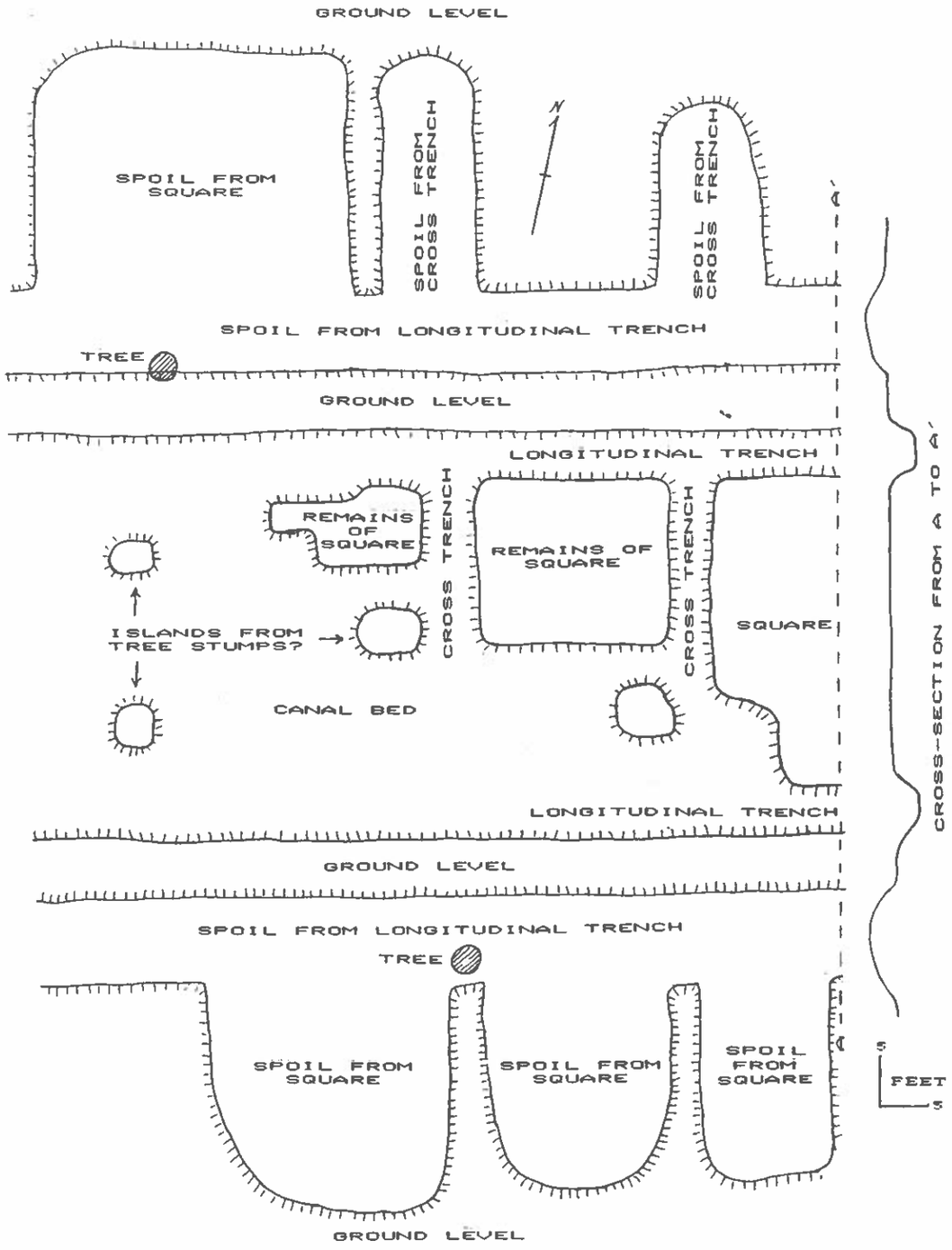
LEFT: Plan view of the trenches and spoil piles at the working end of the Kempsville Canal, abandoned in the midst of construction over a century ago. From 1983 measurements by W.E. Trout and Herbert G. Fisher.

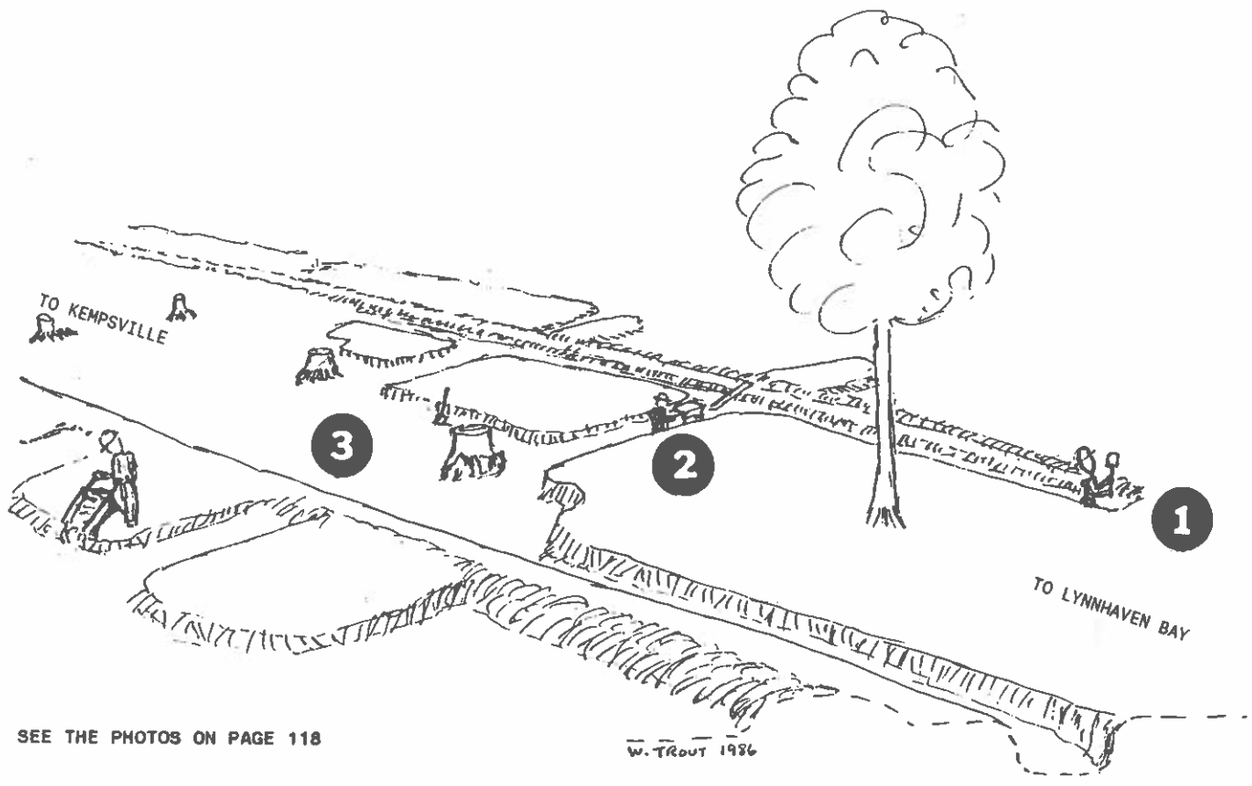
BELOW: A conjectural sketch of the last day of work on the Kempsville Canal, based on the plan view at left. The view is northwest; only a few of the workmen are shown. Our assumption is that the canal was being dug from west to east, in an orderly manner.

1: As the canal was extended to the east, workmen first dug two narrow parallel trenches about 40 feet apart, one along each edge of the canal line. This established the canal line and helped drain the soil in this swampy landscape. The men must have been standing in the ditches, throwing out the spoil to the side of the canal, making a long narrow embankment along each side of the canal.

2: Workmen next dug narrow cross-cuts every 22 feet, from one side of the canal to the other; the spoil was taken to the north side of the canal, where there is a spoil pile opposite each cross cut.

3: Next, the 22x40-foot squares (actually rectangles) still remaining were dug away, starting on the south side; the spoil was deposited on the nearest bank of the canal, opposite each square. Large trees or stumps were apparently worked around, to be pulled out (or blown out with black powder) at a later time; this may explain the small islands left here and there in the westernmost, most complete, part of this section. The final result: a canal 42 feet wide and (according to the 1860 report) three feet deep.





SEE THE PHOTOS ON PAGE 118

MORE HISTORIC CANALS IN VIRGINIA BEACH

THE CANAL WHICH CREATED LYNNHAVEN BAY

The Lynnhaven River was at first just a sluggish stream, entering Chesapeake Bay over a mile to the west, through what is now Pleasure House Creek. What is now called Lynnhaven Inlet was blocked by a narrow sandbar until Adam Keeling, who had a plantation there around 1700, organized a group to dig a trench through the sandbar for their canoes. Almost immediately after, a storm caused high tides to enter the inlet, and tidal action afterwards created Lynnhaven Bay, destroying the graveyard of the first Parish Church at Church Point, near the Adam Thoroughgood House.[1] The formation of the bay was told dramatically by Jn. E. Cooke, in an 1884 article on "Grace Sherwood, the One Virginia Witch":[2]

> A sluggish stream formerly crawled in a northerly direction toward the Chesapeake, emptied its waters into a small lagoon separated from the bay by a narrow sand bar, and escaped by an inlet at the western extremity of the lagoon [now Pleasure House Creek]. A gentleman residing in the vicinity was fond of boating on the Chesapeake, but to reach the open bay was obliged to make the long detour. In front was the low sand bar of very inconsiderable width, and, long meditating on the subject, he determined at last to dig a canal through the obstruction wide enough for the passage of his boat. This scheme was accomplished, but the result was disastrous. The Chesapeake, at the first high tide, rushed through the opening, and carried all before it. The little channel became an inlet half a mile wide, which would float a ship; and the waters of the bay were not even content with this feat of engineering science; they rolled steadily inland, following the course of the sluggish stream, encroached more and more, undermined what they did not overflow, and one of the results was the destruction of an ancient church on the west shore. The edifice, beaten by the waters, slowly crumbled, at last fell, and was completely submerged. The old tombstones, with their coats of arms and curious inscriptions, went with the rest; and bathers near the spot still occasionally touch them with their feet, and are able to read the names by the sense of touch.

---

1. Virginia Beach, by J.M. Jordan, IV and F.S. Jordan, Hale, 1974, p.19.

2. Jn. E. Cooke, "Grace Sherwood, the one Virginia Witch," Harper's New Monthly Magazine, V.69, pp.99-102 (1884).

THE LONG CREEK - BROAD BAY CANAL

The canal still in use between Lynnhaven Bay and Broad and Linkhorn Bays behind Virginia Beach, is of more recent vintage, dating from 1949.[3] It was paid for by the Beach Channel Association, a group of Virginia Beach sportsmen.[4] The 3/4 mile canal, originally 30' wide and 5' deep, is now an essential recreational waterway for the Virginia Beach region.

THE LONDON BRIDGE CREEK - WEST NECK CREEK CANAL

The idea of a canal between London Bridge Creek and West Neck Creek goes back at least to 1807 when William Tatham proposed a "Gun Boat Cut" from London Bridge to Dozier's Bridge.[5] It had the same purpose as the Kempsville Canal, which Tatham also proposed at that time - to let gunboats fire on enemy ships blockading Chesapeake Bay, then retreat to safety.

Perhaps nothing happened until the 1930's when 3.7 miles of straight cuts along West Neck Creek, down to Indian River Road, were dug for flood control by the Soil and Water Conservation Service.[6] During WW II this connection was made navigable to allow small craft to move undetected in the event of an invasion.[7] Is more known about this? As "CANAL NUMBER 2," the ditch was widened and deepened by the Corps in 1987.[8]

The waterway is now part of the 28½ mile Virginia Beach Scenic Waterway for canoes and Kayaks (no powered craft), bisecting Virginia Beach from Chesapeake Bay to the North Carolina line. It is navigable today because of the efforts of Lillie Gilbert and Nancy Shelhorse, owners of Wild River Outfitters, who inspired the city to clear the obstructions. Boy Scouts, the Sierra Club, and canoeists cleaned it up for a grand opening in 1986.

Topo maps for this waterway are in this Atlas. For more details for canoeists see the guidebooks by either Grove or Corbett. Grove considers the best section to be the five miles from West Neck Road to Princess Anne Road. The direction of flow in London Bridge Creek depends on the tide, so check the tide table to determine which direction to go.

---

3. Emmerson, "Canals and Waterways" compilation, Mariners Museum, p.80.

4. Richmond Times Dispatch, June 5, 1949.

5. Peterson 1970, p.89.

6. DISTRICT TIDES, Norfolk District, Corps of Engineers, Nov./Dec. 1987. For study purposes, the Corps refers to the London Bridge - West Neck Creek corridor as "Canal Number 2."

7. Richmond Times-Dispatch, September 14, 1986, p.C-1.

8. DISTRICT TIDES, Nov./Dec. 1987.

THE "LOST" BRITISH CANAL

It is not clear if any of the above canals might be the "Portions of an unfinished canal through which the British hoped to reach Norfolk without passing the harbor defences [which] may still be seen near Cape Henry."[9]

Professor Norma L. Peterson, author of THE DEFENCE OF NORFOLK, has found no evidence for such a British canal, but she suggests if there had been one, something like the Kempsville Canal route would be most likely. A canal at Cape Henry would not have been needed because the British controlled that area; but for awhile the British were in the Lynnhaven area so they might have started a canal from there to the Elizabeth River to attack Norfolk from behind.[10] Has anyone found the "lost" British canal?

LAKE JOYCE ISLAND'S CHANNEL

Lake Joyce, a mile west of Lynnhaven Inlet, has one large island. It is said that the island was formed when a channel was cut on the east side, and the dirt from it was piled up. Legend has it that it was part of a 17th Century pirate camp, or an Indian fort or mound. In any event, it predates at least 1924 when the island was mentioned in GLEANINGS IN THE HISTORY OF PRINCESS ANNE COUNTY, by Benjamin D. White, and in Squires' THE DAYS OF YESTER-YEAR (1928).[11]

IN NORFOLK: THE NORFOLK AND PRINCESS ANNE CANAL

The Norfolk and Princess Anne Canal Company was chartered in 1856 to construct a canal about a mile long from Tanners Creek (now called the Lafayette River), close to Old Town (now Norview) in a north-easterly direction, to Little Creek (an arm of which is now under Lake Whitehurst). The object was to improve the healthiness of the Little Creek area by the inflow of salt water from Tanner's Creek. The project was financed by the Gordon Estate, of some 2,000 acres, on Little Creek, so it was also known as "Gordon's Canal." About two-thirds of the work was accomplished but it was finally abandoned because the sandy banks were so fluid they kept caving in.[12] The line of excavation was still visible in 1919. The canal route is still shown on modern topo maps as the "Ebb Canal" paralleling Norview Avenue in Norfolk, but it is not as it once was because it passes directly through Norview Avenue's cloverleaf intersection with Interstate 64.[13]

---

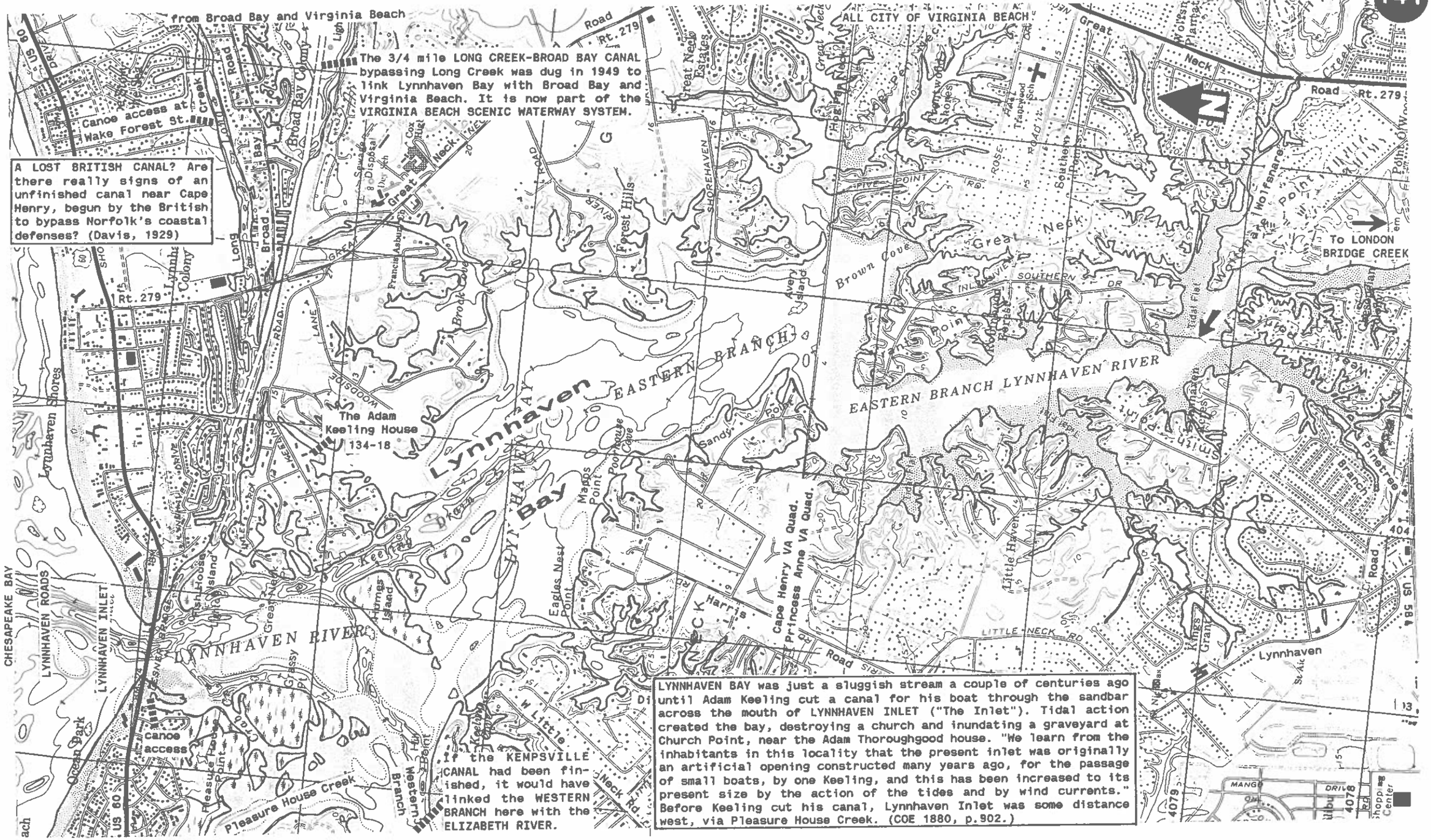
9. Jane E. Davis, Jamestown and her Neighbors, Garrett & Massie, Richmond, 1929, p.70.

10. Letter from Norma L. Peterson to W.E. Trout, Jan. 1972.

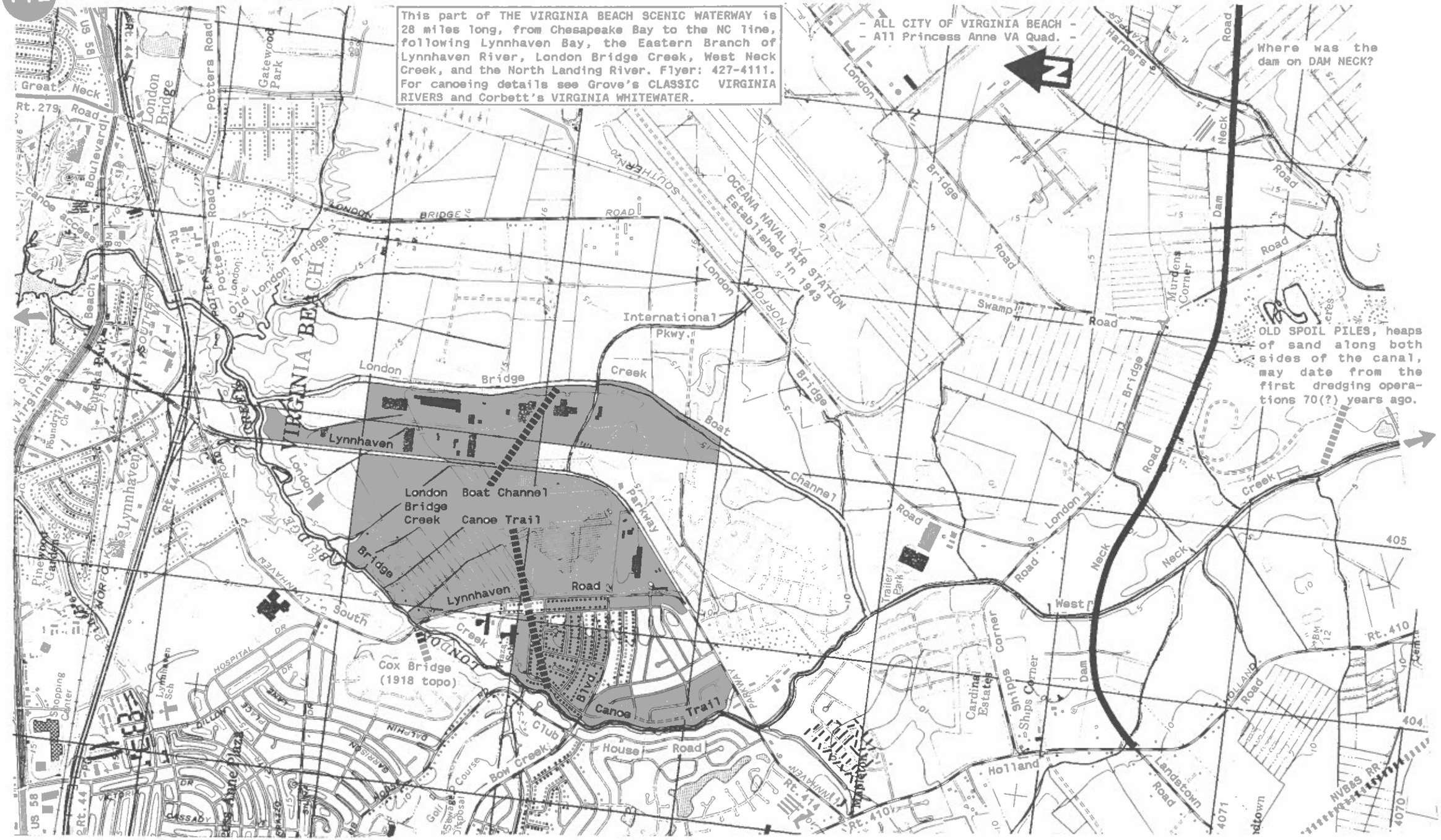
11. From Lake Joyce Island file (44VB64), Department of Historic Resources. See the Little Creek Quad. for topography.

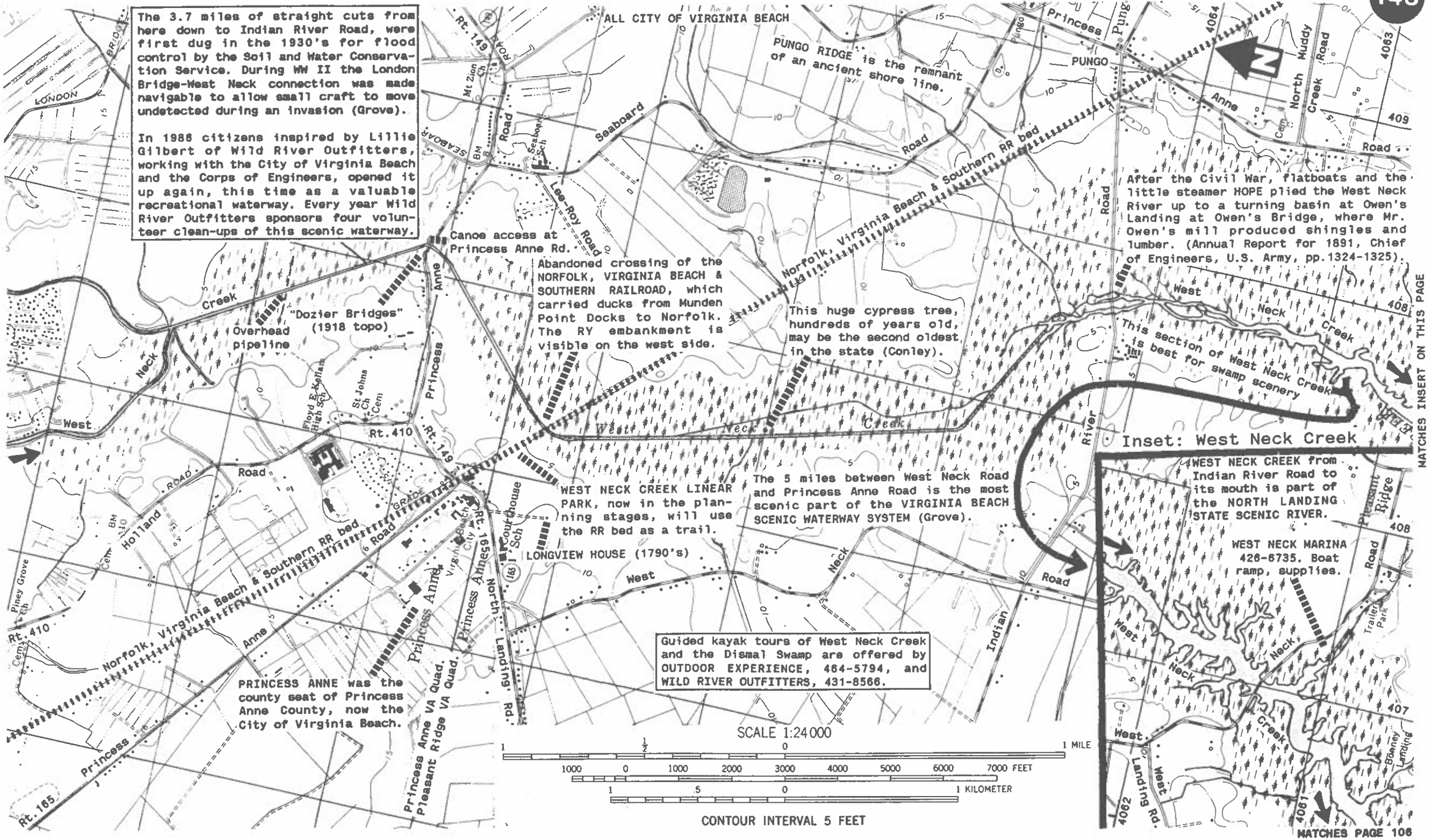
12. Sams, p.130, and handwritten notnote on opposite page.

13. An 1872 newspaper (not seen) refers to another canal related to Gordon's (Tim Bosquet).

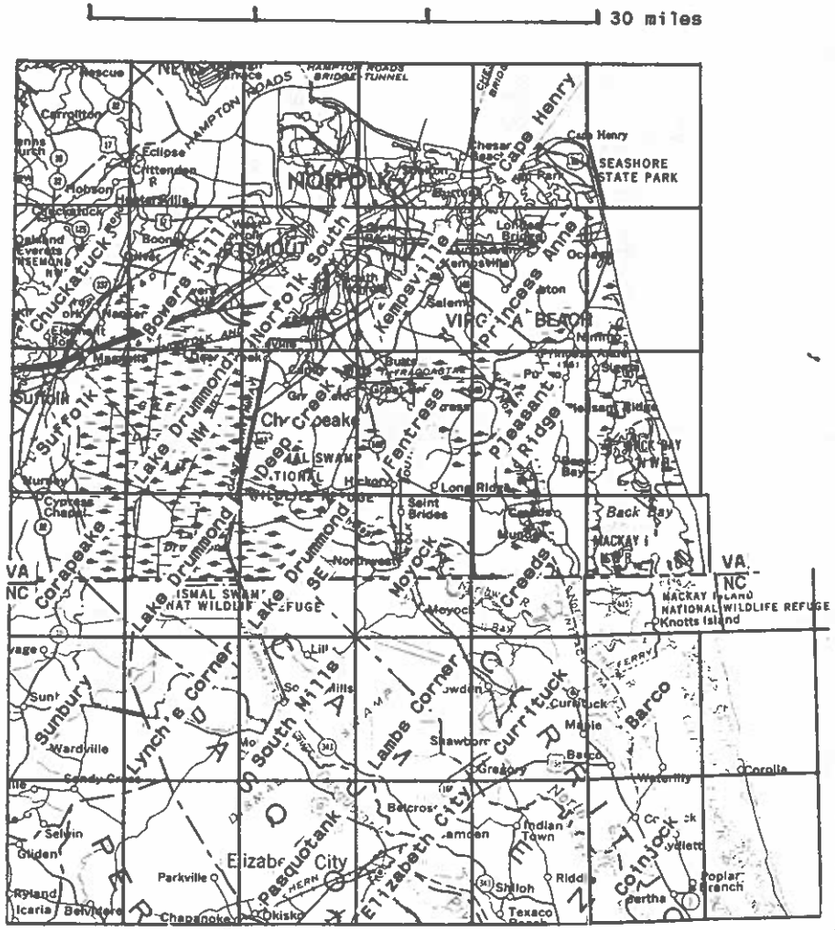

from Broad Bay and Virginia Beach
The 3/4 mile LONG CREEK-BROAD BAY CANAL bypassing Long Creek was dug in 1949 to link Lynnhaven Bay with Broad Bay and Virginia Beach. It is now part of the VIRGINIA BEACH SCENIC WATERWAY SYSTEM.
ALL CITY OF VIRGINIA BEACH
A LOST BRITISH CANAL? Are there really signs of an unfinished canal near Cape Henry, begun by the British to bypass Norfolk's coastal defenses? (Davis, 1929)
Canoe access at Wake Forest St.
To LONDON BRIDGE CREEK
The Adam Keeling House 134-18
LYNNHAVEN BAY
EASTERN BRANCH OF LYNNHAVEN
EASTERN BRANCH LYNNHAVEN RIVER
LYNNHAVEN RIVER
CHESAPEAKE BAY
LYNNHAVEN ROADS
LYNNHAVEN INLET
Cape Henry VA Quad.
Princess Anne VA Quad.
Pleasure House Creek
canoe access
If the KEMPSVILLE CANAL had been finished, it would have linked the WESTERN BRANCH here with the ELIZABETH RIVER.
LYNNHAVEN BAY was just a sluggish stream a couple of centuries ago until Adam Keeling cut a canal for his boat through the sandbar across the mouth of LYNNHAVEN INLET ("The Inlet"). Tidal action created the bay, destroying a church and inundating a graveyard at Church Point, near the Adam Thoroughgood house. "We learn from the inhabitants in this locality that the present inlet was originally an artificial opening constructed many years ago, for the passage of small boats, by one Keeling, and this has been increased to its present size by the action of the tides and by wind currents." Before Keeling cut his canal, Lynnhaven Inlet was some distance west, via Pleasure House Creek. (COE 1880, p.902.)

142 LONDON BRIDGE CREEK




The 3.7 miles of straight cuts from here down to Indian River Road, were first dug in the 1930's for flood control by the Soil and Water Conservation Service. During WW II the London Bridge-West Neck connection was made navigable to allow small craft to move undetected during an invasion (Grove).
In 1986 citizens inspired by Lillie Gilbert of Wild River Outfitters, working with the City of Virginia Beach and the Corps of Engineers, opened it up again, this time as a valuable recreational waterway. Every year Wild River Outfitters sponsors four volunteer clean-ups of this scenic waterway.
ALL CITY OF VIRGINIA BEACH
PUNGO RIDGE is the remnant of an ancient shore line.
Canoe access at Princess Anne Rd.
Abandoned crossing of the NORFOLK, VIRGINIA BEACH & SOUTHERN RAILROAD, which carried ducks from Munden Point Docks to Norfolk. The RY embankment is visible on the west side.
"Dozier Bridges" (1918 topo)
Overhead pipeline
This huge cypress tree, hundreds of years old, may be the second oldest in the state (Conley).
After the Civil War, flatboats and the little steamer HOPE plied the West Neck River up to a turning basin at Owen's Landing at Owen's Bridge, where Mr. Owen's mill produced shingles and lumber. (Annual Report for 1891, Chief of Engineers, U.S. Army, pp.1324-1325).
This section of West Neck Creek is best for swamp scenery
Inset: West Neck Creek
WEST NECK CREEK LINEAR PARK, now in the planning stages, will use the RR bed as a trail.
The 5 miles between West Neck Road and Princess Anne Road is the most scenic part of the VIRGINIA BEACH SCENIC WATERWAY SYSTEM (Grove).
LONGVIEW HOUSE (1790's)
WEST NECK CREEK from Indian River Road to its mouth is part of the NORTH LANDING STATE SCENIC RIVER.
WEST NECK MARINA 426-6735. Boat ramp, supplies.
Guided kayak tours of West Neck Creek and the Dismal Swamp are offered by OUTDOOR EXPERIENCE, 464-5794, and WILD RIVER OUTFITTERS, 431-8566.
PRINCESS ANNE was the county seat of Princess Anne County, now the City of Virginia Beach.
Norfolk, Virginia Beach & Southern RR bed
Seaboard
Lee-Roy Road
Princess Anne Road
Indian River Road
West Neck Road
Holland Road
Rt. 410
Rt. 149
Rt. 165
Princess Anne VA Quad.
Pleasant Ridge VA Quad.
SCALE 1:24000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 5 FEET
MATCHES INSERT ON THIS PAGE
MATCHES PAGE 106

TOPO MAPS USED IN THIS ATLAS



The standard detailed maps for geographical research in this country are topographic maps 7½ minutes on a side, called 7½' topos or quadrangles (quads), published by the U.S. Geological Survey (USGS). The quads used for strip maps in this atlas have been reproduced full-size so that you can directly compare the annotated atlas maps with the latest updated full-color ones from USGS.

This part of Virginia changes rapidly so you will also need the latest street maps, available in many stores. There are no recent Virginia county maps because there are no counties anymore. Researchers using old records need to know that Nansemond County is now the City of Suffolk; Norfolk County is now the City of Chesapeake; and Princess Anne County is now the City of Virginia Beach.

All U.S. topo maps are available by mail from USGS Map Sales, Box 25286, Denver, CO 80225, or call 1-800-USA-MAPS. Ask for a free map catalog of maps for the state desired.

A Virginia map catalog (free) and Virginia topo maps may also be obtained by mail or over-the-counter from the Virginia Division of Mineral Resources, 900 Natural Resources Drive, Box 3667, Charlottesville, VA 22903, (804) 293-5121 (near the U.VA. campus).

A North Carolina map catalog, and North Carolina topo maps may also be obtained by mail or over-the-counter from the NC Dept. of Natural Resources, Geological Survey Section, P.O. Box 27687, Raleigh, NC 27611, (919) 733-2423.

The following local shops sell Virginia, and sometimes North Carolina, topo maps over-the-counter. Call first to check.

NORFOLK: Eagleton's, Inc., 430 Boush St., 622-1881.
NORFOLK: H & J Vending Co., 7466 Tidewater Drive, 587-4191.
NORFOLK: W.T. Brownley, 118 Plume St., 622-7589/2548

Topo map collections can be studied at these local libraries:

CHESAPEAKE: Chesapeake Public Library, 300 Cedar Road.
NEWPORT NEWS: Christopher Newport College, Smith Library.
NORFOLK: Norfolk Public Library, 301 East City Hall Avenue.
NORFOLK: Old Dominion University Library.
NORFOLK: U.S. Armed Forces Staff College Library.

The VIRGINIA ATLAS & GAZETTEER and the NORTH CAROLINA ATLAS & GAZETTEER are very useful books of topo maps at 1:150,000 scale (1 inch = 2.4 miles) with all the county (and ex-county) roads marked. These are available in many stores and by mail from DeLorme Mapping, P.O. Box 298, Freeport, ME 04032.

THE UTM GRID SYSTEM:

The grid lines drawn on the topo maps are a kilometer apart. This is a handy grid for pin-pointing sites, called the Universal Transverse Mercator (UTM) system, which is much easier to use than latitude and longitude and it is now the official system used by government agencies. Some of the North Carolina topos now come with a preprinted UTM grid. You can use this grid to report or locate an historic site or a pollution source. You can also find your own position, using a boat-mounted or hand-held GPS (Global Positioning System) device. Set the device to the UTM grid used by the topo maps, NAD27 CONUS.

To use the grid, turn the map so that north is "up." The vertical lines are numbered from left to right (for example, 378, 379 etc. on the Deep Creek VA quad., atlas page 54) and the horizontal lines are numbered from bottom to top (4066, 4067, etc.). Use the kilometer scale to pinpoint the sites. For example, the center of Deep Creek Lock is 380.36 km from left to right (when facing north!), and 4067.35 km from bottom to top, so its UTM co-ordinates can be written "38036.406735, Deep Creek Quad."

For more details such as zones see National Register Bulletin 28, "Using the UTM Grid System to Record Historic Sites," by Wilford P. Cole for the National Park Service, from Interagency Resources Division, P.O. Box 37127, Washington, D.C. 20013-7127.

DATES OF TOPO MAPS USED IN THIS ATLAS
(Including the latest photorevision)

Barco NC Quad. 1982 (orthophotomap)
Bowers Hill VA Quad. 1986
Cape Henry VA Quad. 1986
Chuckatuck, VA Quad. 1990
Coinjock NC Quad. 1982 (orthophotomap)
Corapeake VA-NC Quad. 1954 *
Creeds VA-NC Quad. 1986
Currituck NC Quad. 1982 (orthophotomap)
Deep Creek VA Quad. 1971 *
Elizabeth City NC Quad. 1982 (orthophotomap)
Fentress VA Quad. 1986
Kempsville VA Quad. 1986
Lake Drummond NW VA Quad. 1954 *, 1977
Lake Drummond SE VA-NC Quad. 1971 *
Lake Drummond VA-NC Quad. 1954 *
Lambs Corner NC Quad. 1982 (orthophotomap)
Lynch's Corner NC Quad., 1982
Moyock VA-NC Quad. 1986
Norfolk South VA Quad. 1986
Pasquotank NC Quad. 1982
Pleasant Ridge VA Quad. 1979
Princess Anne VA Quad. 1986
South Mills NC Quad. 1982
Suffolk VA Quad. 1968 *
Sunbury NC Quad. 1981

1:250,000 maps:
Currituck Sound NC-VA 1969
Norfolk VA-NC 1969

* Asterisks indicate old line-drawn (not photographic) topo maps which are no longer available. Furnished courtesy of W.F. Gianinni, they are used in this atlas because they reproduce well in black-and white. All of these have been supplanted as the standard topos by orthophotomaps (prepared in color from aerial photographs) which are much better at showing complex swampland.

COUNTIES AND EX-COUNTIES IN THE GREAT DISMAL

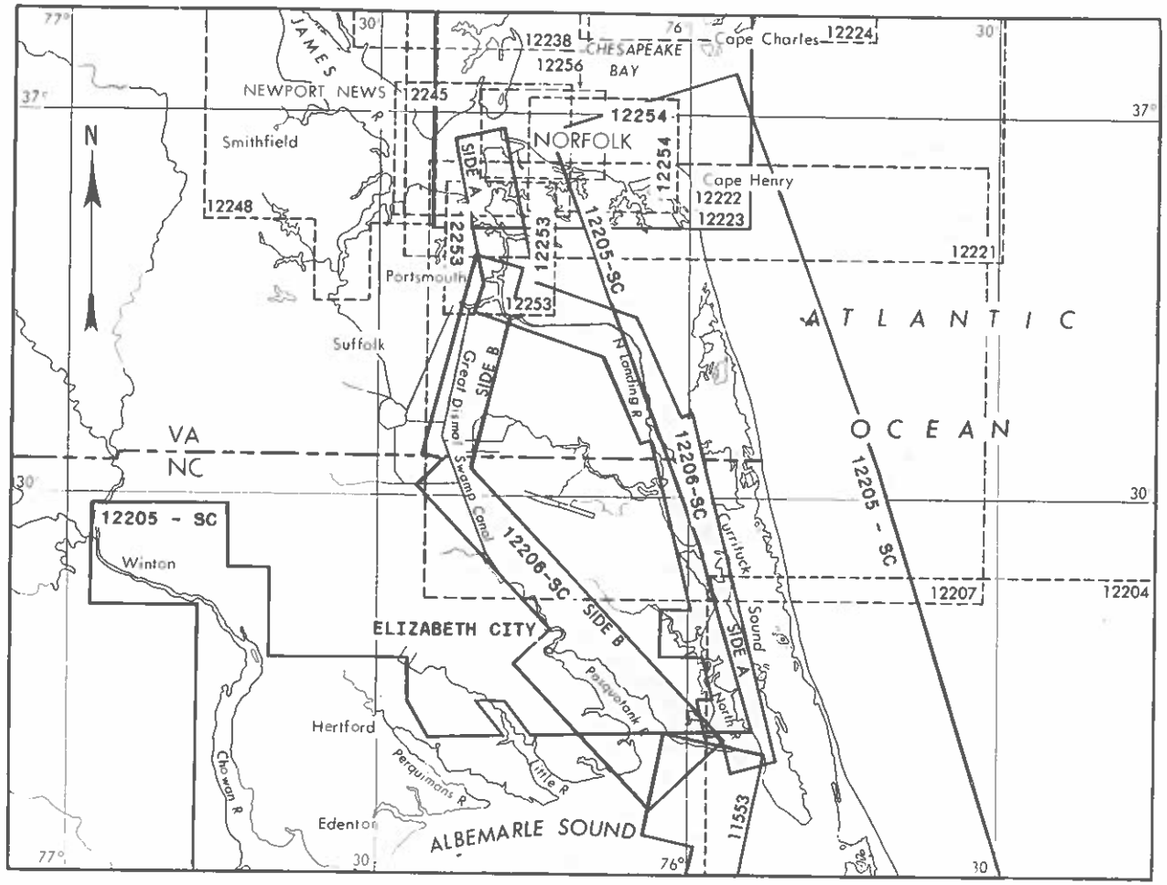
Virginia:

City:	Formerly:	Court House:
Suffolk	Nansemond Co.	Suffolk
Chesapeake	Norfolk Co.	Great Bridge
VA Beach	Princess Anne Co.	Princess Anne

North Carolina:

County:	Court House:
Camden Co.	Camden
Currituck Co.	Currituck
Gates Co.	Gatesville
Pasquotank Co.	Elizabeth City

NAUTICAL CHARTS FOR THE DISMAL SWAMP REGION



ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Dangers:

Sunken wreck Visible wreck + ☼ • Rocks

The maps in this atlas should not be used for small-craft navigation. Use the latest nautical charts from the National Oceanic and Atmospheric Administration (NOAA), which are available in marinas and engineering stores or by mail with a check to "NOS, Department of Commerce" from Distribution Branch (N/CG33), National Ocean Service, Riverdale, MD 20737-1199 or by phone with a Visa or Mastercard by calling (301) 436-6990. NOAA's Catalog #1, a check-list of "Charts and Publications for the Atlantic and Gulf Coasts" (#2 covers the west coast) is free.

12206-SC, "Norfolk to Albemarle Sound via North Landing River or Great Dismal Swamp Canal" (sic) at 1:40,000 scale. This is the recommended chart for the Albemarle & Chesapeake and the Dismal Swamp Canals. The June 1995 edition was used for some of the pages in the GREAT DISMAL ATLAS.
12205-SC, "Cape Henry to Pamlico Sound, including Albemarle Sound," 1:40,000 and 1:80,000, covers the coast, Back Bay, and Currituck and Albemarle sounds.
12253, "Norfolk Harbor and Elizabeth River," 1:20,000, has more harbor details.
12254, "Cape Henry to Thimble Shoal Light," 1:20,000, has Lynnhaven Bay details.

BOATING GUIDES (selected):

THE MID-ATLANTIC EDITION of WATERWAY GUIDE, available in marinas or by mail from 6151 Powers Ferry Road N.W., Atlanta, GA 30339, 800-233-3359, has many essential details about navigation and mooring on the DSC and A&C. The editors would appreciate your suggestions for the next edition.

NORTH CAROLINA COASTAL BOATING GUIDE is a map of marinas and historic and natural sites along North Carolina's coastal waterways, free from the Dismal Swamp Canal Visitors Center, or by calling 1-800-VISIT NC.

THE ATLANTIC INTRACOASTAL WATERWAY'S DISMAL SWAMP AND ALBEMARLE & CHESAPEAKE CANALS, the Corps' excellent historical brochure, is available from the Corps or the DSC Visitor's Center.

See also the CANOEING GUIDEBOOKS section.

LOCK AND BRIDGE OPENING TIMES (subject to change):

GREAT BRIDGE LOCK operates on demand.

GREAT BRIDGE BRIDGE, blocking the Virginia Cut, opens only on the hour from 6 a.m. to 7 p.m., and on demand at night (after 7 p.m.). Phone: 757-547-2109.

CENTERVILLE TURNPIKE BRIDGE, and NORTH LANDING BRIDGE, blocking the Virginia Cut, open on the hour and half-hour from 6 a.m. to 7 p.m. and on demand at night.

LOCKS ON THE DISMAL SWAMP CANAL operate only at 8:30 and 11:00 a.m., and 1:30 and 3:30 p.m. The locks stay closed during droughts which threaten the Great Dismal Swamp. Phones: Deep Creek, 757-487-0831; South Mills, 919-771-5906.

TIDES:

There are two high, and two low tides every day, and the time changes daily. The basic tide table for Chesapeake Bay, in NOAA chart # 12206-SC and in local newspapers, lists the times of high and low tide at Hampton Roads (Sewell's Point) at the mouth of the Elizabeth River. To obtain the time at other locations, add the following times, which are very approximate because upriver they are affected by wind and river flow. More accurate information would be appreciated.

Portsmouth and Norfolk Harbors: add 15 minutes
At Kempsville: add about 4-5 hours?
At Gilmerton Lock: add about 2 hours?
At Deep Creek Lock: add 4-6 hours
At Great Bridge Lock: add 4-6 hours
On London Bridge Creek at Virginia Beach Boulevard: add about 3 hours
(Important for canoeists who prefer not to paddle against the tide)
In North Carolina: No tide at South Mills, Coinjock, or in Albemarle Sound

THE FUTURE OF THE DISMAL SWAMP CANAL

SOME SUGGESTED SHORT AND LONG TERM CANAL PROJECTS TO HELP THE SURVIVAL OF THE DISMAL SWAMP CANAL

(See also the atlas maps and text)

THE GILMERTON CUT:

PREVENT FURTHER COLLAPSE OF THE GILMERTON LOCK: Work with Atlantic Energy Company on a plan to stabilize and repair the stone walls of the Gilmerton Lock, which are gradually falling down through natural causes.

PROTECT THE GILMERTON LOCK WITH AN HISTORIC EASEMENT: An historic easement on the lock would protect it in case a future owner is not appreciative of its historic value.

ERECT A HIGHWAY MARKER FOR GILMERTON, THE LOCK AND THE CUT: Erect historic marker on the Cut, probably on the Military Highway at Gilmerton.

PROTECT THE GILMERTON CUT CORRIDOR FOR THE FUTURE: Try to protect the Gilmerton Cut corridor from further encroachment and infilling, with an eye on restoring small craft navigation in the far future. Perhaps an historic easement would help.

REPAIR THE GILMERTON STOP GATE: The stones fallen from this structure need to be hauled out of the cut and put back in place. This would also improve the channel to the private docks along the cut. See that it is protected as an important historic site.

DEEP CREEK LOCKS PARK:

ERECT AN INTERPRETIVE SIGN: To make the park effective as an historic area, visitors need to know about the historic sites there: Deep Creek Lock, the Cross Lock, the New Tumbling Dam, the Gilmerton Cut, the American Society of Civil Engineers' marker, and the source of the lock stones on display. A map would help. A panel or kiosk with plastic windows would allow the display of inexpensive, replaceable historic maps and displays.

ERECT ANOTHER PARK ENTRANCE SIGN ON U.S.17: Tourists will easily miss the park and its historic sites unless an "HISTORIC DEEP CREEK LOCKS PARK" directional sign is out on the highway. A standard brown sign with an arrow would do.

THE WALLACETON OASIS: See page 59.

CREATE AN HISTORIC "WALLACETON OASIS" BETWEEN THE CANAL AND U.S.17, FROM AT LEAST WALLACETON TO THE FEEDER DITCH:

* The proposed widening of U.S.17 into a four-lane highway will be a once-only opportunity to change this dangerous high-speed road into a parkway along which visitors can safely picnic beside the Dismal Swamp Canal and enjoy this unique historic resource.
* By moving the new road to the east an "oasis" will be created for visitors to the canal and the swamp. This will preserve Wallaceton, the Canal Superintendent's House, the entrance to the North West Canal, and the entrance to the Feeder Ditch. This is the historic midpoint of the Dismal Swamp Canal and the eastern gateway to the Great Dismal Swamp National Wildlife Refuge. It is where visitors will stop.

CREATE MARKERS AND FLYERS TO MAKE THE CANAL MORE INTERESTING:

MAJOR INTERPRETIVE MARKERS: The canal can be boring without historical interpretation. Sites which deserve elaborate markers with text and illustrations include:

* Gilmerton Lock and Cut (probably at Military Highway)
* Deep Creek Locks
* Wallaceton and the North West Canal
* Feeder Ditch and Lake Drummond
* Lake Drummond Hotel (at the old state line)
* South Mills Locks
* Turner's Cut and the Moccasin Track

INEXPENSIVE MARKERS: These can be generic "Dismal Swamp Canal" signs with the site names stenciled in, so that many sites can be marked. Such sites along the canal include (north to south):

* Gilmerton Cut
* Deep Creek Locks Park
* Town of Deep Creek
* Mouth of Big Entry Ditch
* Site of Wilkins Lock
* NIKE missile sites
* Mouth of Fivemile Ditch
* West Landing at Cornland Road
* Douglas Landing at Douglas Road
* Wallace's Culvert
* Mouth of North West Canal at Glencoe Road
* Canal Superintendent's House
* Wallace Home
* Glencoe Plantation site
* Site of North West Lock
* Roller Bridge across canal
* Mouth of Feeder Ditch at Arbuckle landing
* Angle Siding, old RR crossing
* The Angle
* Site of the Halfway House
* State Line
* Mystery Circle in the swamp
* Cross Canal (Hamburg Ditch) to Gates County
* Site of "Temporary Lock"
* Site of Major Farange's Hostelry
* Dismal Swamp Canal Welcome Center
* Site of Culpepper Lock
* New Rt.17 Bridge
* Site of Spence's Lock
* Town of South Mills
* South Mills Lock
* Turner's Cut and the Moccasin Track
* Elizabeth City

ERECT DISMAL SWAMP CANAL MILEPOSTS ALONG U.S.17:

* There are already mileage markers along the canal, erected for boaters by the Corps of Engineers. These are close to the original historic stone markers erected by the canal company perhaps two centuries ago. The same mileage system, if used on U.S.17 in both states, would allow interpretive brochures and maps of the canal to be used by both boaters and drivers.

ERECT SIGNS FOR THE DISMAL SWAMP RING ROAD:

* DISMAL SWAMP RING ROAD signs with arrows would help visitors take a self-guided historic tour around the heart of the Great Dismal.

BUILD AN AUTHENTIC REPLICA OF A DISMAL SWAMP GONDOLA:

* Modeled carefully on Porte Crayon's woodcuts, to be permanently based in the swamp. Clear out enough of one of the historic canals such as the Washington Ditch, Jericho Canal or the Cross Canal to have regular guided nature tours into the swamp.

WORK WITH ARCHAEOLOGISTS ON DISMAL SWAMP PROJECTS

* A study of the Gilmerton Lock (look for copper sheathing; stone floor; signs of commercial activity)
* Work out exact locations of the earlier locks at Deep Creek and South Mills.
* Search for and examine remains of other locks removed during the evolution of the canal. For example, remains of the Culpepper Lock have been seen at low water. The whole canal should be examined carefully, especially at the former lock sites, when there is a drawdown.
* Make a thorough examination of the wooden North West Canal outfall lock, which is still partially intact.
* Search for water control structures on the Dismal Swamp ditches, to work out the earlier water control system and to see if there is any evidence of control structures which were navigated by boats.
* Determine if any of the unfinished Kempsville Canal is suitable for archaeological study.
* Locate stones from the "lost" stone locks to use with markers at the sites - Old Deep Creek Locks; Wilkins; Northwest; Culpepper; Spence's; and Old South Mills locks.

ORGANIZE A WEEKEND "RETREAT" TO BRAINSTORM ON THE FUTURE OF HISTORIC CANAL SITES IN THE DISMAL SWAMP:

* At the Triple-R Ranch this could include a boat trip to the North West Canal outfall locks and a walk and hay ride along the towpath.

MAPS CITED BY DATE:

(1775) = map of the Norfolk region, in the Chesapeake Central Library (from Barker)
(ca.1809 map) = "A sketch of the Country through which it is contemplated to cut two Canals, forming a communication between Roanoke river and... Nansemond." (n.d, LVA)
(1826 map) = Plan & Profile of the Dismal Swamp Canal, by Col. Gratiot, Corps of Engineers, July 1826. National Archives RG 46-a (Internal Improvements Ms maps #63)
(1827 Böye) = A map of the State of Virginia, by Herman Böye, 1827, VC&NS collection from Tom Headlee)
(1879 map) = General Map illustrating the Survey of Water Routes, Capt. C.B. Phillips, Corps of Engineers, 1878-9. Annual Report of the Chief of Engineers, U.S. Army, 1880, p, p.896.
(1890 map) = "Map of country between Norfolk and Atlantic Ocean showing location of proposed water-way to connect Lynn Haven Bay with Eastern Branch of Elizabeth River, 1890" National Archives RG77-G430-1.
(1917) = Agreement Line between Richmond Cedar Works and John L. Roper Lumber Company, July 1917 (Weeks Collection)
(1918 topo) = Cape Henry 15' quad, 1918

MAPS CITED BY NUMBER:

(452) = C&GS Norfolk Harbor and Elizabeth River, 1962
(1227) = C&GS Cape Henry to Currituck Beach Light, 1962
(1228) = C&GS Albemarle Sound, 1963
(12206 map) = # 12206-SC, "Norfolk to Albemarle Sound via North Landing River or Great Dismal Swamp Canal" (sic) at 1:40,000 scale. This is the recommended chart for the Albemarle & Chesapeake and the Dismal Swamp Canals. The June 1995 edition was used for some of the pages in the GREAT DISMAL ATLAS.
(G430-3) =National Archives RG 77-G430-3, no date, untitled except "Map B".

OTHER MAPS CITED:
(Moyock 15') = 1939 Moyock 15-minute quad.

REFERENCES CITED BY NAME:

(Arnold, 1888) = THE DISMAL SWAMP AND LAKE DRUMMOND, by Robert Arnold, Norfolk, 1888. Reprinted 1969 by Johnson Pub. Co., P.O. Box 217, Murfreesboro, NC 27855. Good stories of the swamp.
(B&L 1:656) = BATTLES AND LEADERS OF THE CIVIL WAR, Century Magazine, c.1887-88, V.1, p.656 (map).
(Barker) = Stuart O. Barker, Chesapeake, 1994, who furnished most of the information on mills. From his unpublished "Grist Mills of Norfolk County". His references: Va. Mag. of Hist. & Biog., V.36, p.183; W.H. Stewart, NORFOLK COUNTY (same as above?); and his acknowledgements to Elizabeth Wingo, Elizabeth Hanbury, Frank Portlock, Catherine Barker and Stuart Smith.
(Berkeley, 1976) = "Man and the Great Dismal," by Edmund and Dorothy Berkeley, VIRGINIA JOURNAL OF SCIENCE, 27:3, Fall 1976, pp.141-171.
(Bishir & Southern) = A GUIDE TO THE HISTORIC ARCHITECTURE OF EASTERN NORTH CAROLINA, by C.W. Bishir and M.T. Southern, U. NC Press, 1996.
(Brown, 1970) = THE DISMAL SWAMP CANAL, by Alexander Crosby Brown, Norfolk County Historical Society of Chesapeake, 1970. The classic reference book on the DSC, now out-of-print.
(Brown, 1981) = JUNIPER WATERWAY, A HISTORY OF THE ALBEMARLE AND CHESAPEAKE CANAL, by Alexander Crosby Brown, University Press of Virginia for the Mariners' Museum and the Norfolk County Historical Society of Chesapeake, 1981. The classic reference book on the A&C.
(Butchko) = THE FORGOTTEN GATES, by Thomas R. Butchko, Gates Co. Hist. Soc., 1991.
(Byrd, 1728) = William Byrd II's HISTORY OF THE DIVIDING LINE and SECRET HISTORY OF THE LINE, in for example THE PROSE WORKS OF WILLIAM BYRD OF WESTOVER, edited by Louis B. Wright, Harvard University Press, 1966. Byrd is also famous for his intriguing "secret diary" but the daily entries for this period have evidently been lost.
(Cross 1966) = "The Canal" (also check JUNIPER WATERWAY)
(Davis, 1929) = Jane E. Davis, JAMESTOWN AND HER NEIGHBORS, Garrett & Massie, Richmond, 1929, p.70.
(Davis, 1962) = THE GREAT DISMAL SWAMP, ITS HISTORY, FOLKLORE AND SCIENCE, by Hubert J. Davis, 1962, reprinted in 1971 by the Johnson Pub. Co., Murfreesboro, NC 27855.
(Fowler 1991) = "Water Transportation," by M.N. Fowler. JOURNAL OF THE CURRITUCK COUNTY HISTORICAL SOCIETY, V.1, No.3, 1976.(In Currituck Co. Public Library)
(Gray, 1976) = "Waterlily," by Curtis Gray. See Fowler 1991.
(Grove) = CLASSIC VIRGINIA RIVERS, by Ed Grove, Howling Wolf Pubs., 1992.
(Harper's) = HARPER'S NEW MONTHLY MAGAZINE, V.69, pp.99-102 (1884).
(Hennigar 1977) = "Coastal processes and resulting forms of sediment accumulation... ed. by V. Goldsmith, Eastern Section, Soc. of Economic Paleontologists & Mineralogists, 1977 (LVA)
(IWW 1937) = THE INTRACOASTAL WATERWAY: NORFOLK TO KEY WEST, Federal Writers Project, WPA, USGPO, 1937.
(Johnson, 1991) = GUN CLUBS AND DECOYS OF BACK BAY AND CURRITUCK SOUND, by Archie Johnson and Bud Coppedge, Curback Press, Virginia Beach, 1991. (A copy is available for reading at Hampton Lodge Family Campground.)
(Kirk 1979) = THE GREAT DISMAL SWAMP, the first Dismal Swamp Symposium, edited by Paul W. Kirk, Jr., University Press of Virginia, 1979. Of special interest here is "Man and the Swamp: The Historical Dimension," by Peter C. Stewart (pp.57-73)
(N.C. Gazetteer) = North Carolina Gazetteer, by William S. Powell, UNC Chapel Hill, 1968.
(Norman, 1991) = Mitchell D. Norman, in: H.G. Marshall (Ed.), PROCEEDINGS OF THE BACK BAY ECOLOGICAL SYMPOSIUM, Old Dominion Univ., 1991.
(O'Dell, 1988) = "The North Landing Scenic River System Report, Appendix A" (Historical Overview), 1988, by Jeffrey M. O'Dell, for the Virginia Department of Conservation and Historic Resources. (Copy courtesy of Richard Gibbons)
(Old Cuttings map) = from J.H. Reid's REPORT ON DISMAL SWAMP, 19 pp.+, Camp Mfg. Co., 1952. No longer in Camp files. Map courtesy of GDSNWR; report courtesy of Mallory Hope Ferrell (VC&NS Archives).
(Peterson 1970) = THE DEFENCE OF NORFOLK IN 1807, Norma Lois Peterson, Ed., Norfolk Co. Hist. Soc. of Chesapeake, 1970. Also see Wertenbaker, NORFOLK, pp.113-114.
(Pugh and Williams) = THE HOTEL IN THE GREAT DISMAL SWAMP, by J.F. Pugh and F.T. Williams, Old Trap, N.C., 1964.
(Ruffin, 1861) = SKETCHES OF LOWER NORTH CAROLINA, by Edmund Ruffin, Raleigh 1861, pp.205-208 (Huntington Library).
(Simpson, 1990) = THE GREAT DISMAL, A CAROLINIAN'S SWAMP MEMOIR, by Bland Simpson, Univ. NC Press, 1990. Two chapters are further illustrated in the Spring and Summer 1990 issues of VIRGINIA CAVALCADE.
(Stansbury, 1925) = THE LAKE OF THE GREAT DISMAL, by Charles F. Stansbury, with a preface by Don Marquis, A. & C. Boni, NY 1925.
(Tate, 1976) = "Coinjock" by Elizabeth Tate. See Fowler 1991.

ABBREVIATIONS:
BPW = Virginia Board of Public Works
COE = Corps of Engineers, esp. Annual Reports of the Chief of Engineers, U.S. Army
LVA = Library of Virginia, formerly Virginia State Library

INTERVIEWS CITED:

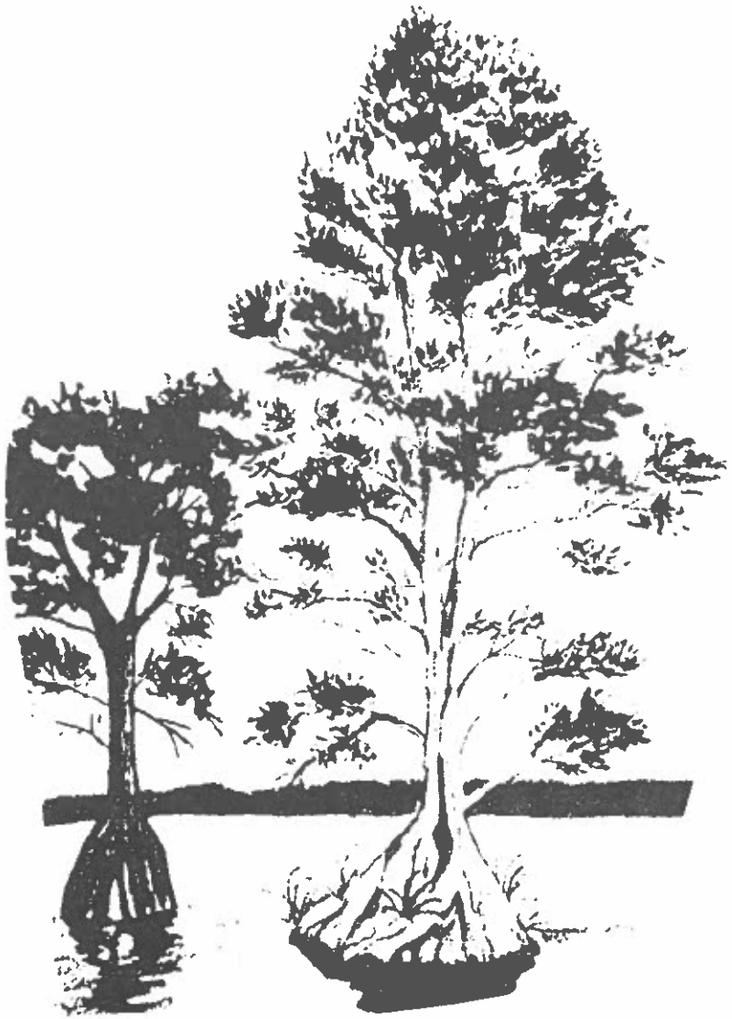
(Aldred) = Tom Aldred, Jr., Acorn Hill
(Bottoms) = Ed Bottoms, Suffolk
(Conley) = Chuck Conley of OUTDOOR EXPERIENCE
(Culp) = Lloyd Culp, Great Dismal Swamp National Wildlife Refuge
(Daniels) = Sam Daniels, Corapeake
(Gregory) = W.R. Gregory, Lynchs Corner
(Harrell) = C.E. and Barbara Harrell, Suffolk
(Keel) = Ralph Keel, GDSNWR
(Ralph) = Aubrey Ralph, Corapeake
(Raynor) = J. E. Raynor, Richmond
(Stallings) = Richard & Johnnie Stallings of Johnnies Diner, Lynchs Corner.
(Wallace) = John G. Wallace III and George T. Wallace IV
(Whitehurst) = Mary E. Whitehurst, South Mills

HISTORIC SITES AFFECTED BY THE WIDENING OF US 17:
See "Draft Environmental Impact Statement, Route 17 - George Washington Highway," US Department of Transportation, and VA Department of Transportation, December 1996.

CASEY HOLTZINGER PRINTS:
We especially want to thank Mr. J.D. Gregory of the Imperial Gallery and Frame Shop, 540 Taldon Avenue, Virginia Beach VA 23462, publisher of Casey Holtzinger's marvelous drawings, for permission to reproduce four of them which neatly illustrate historic canals in the Dismal Swamp. They are of necessity reproduced here in black and white. Readers are encouraged to obtain their own prints in color suitable for framing, from the Frame Shop, the Williamsburg Pottery, Chesapeake Campground or another source of Casey Holtzinger's ever-growing collection of meticulously accurate historic prints.

acknowledgements, 7
airstrips, 26, 58
Albemarle & Chesapeake Canal, 5, 99-117;
gourmet cruise on 113; history of, 114-117
Albemarle Region Waterways, 124-125
Albemarle Sound, 71, 112
American Society of Civil Engineers, 76
Angle, The, 50, 52, 62
Back Bay National Wildlife Refuge, 122
Badger Ditch, 22
batteaux, 40, 73
Battle of Camden, see South Mills
Battle of South Mills, see South Mills
Bell's Island, 109
Bell's Mill, 103
Bennett's Creek, see Cross Canal section
Big Entry Ditch, 18, 57
Blackwater Creek, 107
blimp hangers, 52, 67, 70
British Canal, still Lost, 140-141
Broadwater, John, 135
Brown, Alexander C., in memory of, 96
Byrd, Harry, 86
Byrd, William, see state line
Cahill, Carl, 134-135
Camden Point Lighthouse, 112
campgrounds, 6
Canal Superintendent's House, see Wallaceton
canoe rentals & guidebooks, 6; maps, 120-125
Centerville Turnpike, 104
Chesapeake Waterways Map, 120-121
Civil War, 34, 64, 66, 78, 110-111, 116
Coinjock, 17, 99, 110-111; see also A&C Canal
Cook's Mill, 19
Corapeake Ditch, 23, 45, 62; compare with Orapeake
Corey's Ditch, 5, 108
Corps of Engineers, 6, 86
Cross Canal, 4, 17, 24, 39-41, 63
cruises, 6; nautical maps, 145
Culpepper Lock, 52, 63, 77, 84
Currituck & Bay, 99, 109
Deep Creek & Lock, 50, 52, 54-56, 75, 84, 121
Dike Ditch & Leg, 26
Dismal Swamp Canal, 4, 72-87 etc.; future of, 146;
tracking on, 43; Cross Canal to, see Cross Canal;
map & profiles, 82-85
Dismal Swamp Canal Welcome Center, 4, 47, 50, 52, 63,
76, 87
Dismal Swamp Railroad, 45, 46, 57, 62
Dismal Swamp Ring Road, 16, 50
Dismal Swamp Wetlands, 128
ditches in the Great Dismal, map, 32
dividing line, see state line
dredging machines on the A&C, 114-115
Dry Dock #1, 53
Duke, Alvah, 26, 32
Dutch Gaps in North Landing River, 106
East Ditch, 18, 61
Elizabeth City, 17, 52, 67-69
Elizabeth City & Norfolk RR, 45, 104, 128
Elizabeth River, see Waterside, Deep Creek
Farange's Hotel, 63, 89-90
Feeder Ditch, 4, 50, 52, 58; Lock, 60-61, 80-81
Ferrell, M.H., 33, 44-45, 72, 147
Fivemile Ditch, 57
Folly, 24, 25
game, 12-13
Gates County, NC 39-41; see Cross Canal
Gilmer, Thomas Walker, 90-91
Gilmerton Cut, 4, 50, 52, 54-55, 78, 84, 88-95
Glencoe, 58; see also Wallaceton
gondola, see Jericho Ditch
Gordon's Canal, 5, 119, 140
Great Bridge Lock, 50, 99-103, 115-116; how it works, 101
Great Dismal Swamp Coalition, 7
Great Dismal Swamp National Wildlife Refuge, 4, 17, 20,
22, 28-31, 52, 58, 73, 87
Halfway House, see Lake Drummond Hotel
Hamburg Ditch, see Cross Canal
Henry, Patrick, 73
historic sites, 7
historical societies and museums, 6-7
Holtzinger, Casey, prints, 46, 56-57, 100, 117, 147
Horseshoe, 17, 27, 50
Hudnell Ditch, 20
Indian Creek, 129
Insurance Ditch, 26
Interior Ditch, 61
Jefferson, Thomas, and Kempsville Canal, 137
Jericho Canal, 4, 16-17, 20, 33-37, 61
Jones Millpond, 23
Kempsville Canal, 5, 50, 118, 123, 136-139, 141;
history of, 137-139
Kim Saunders Ditch, 62
Knotts Island Ferry, 99, 109
Lake Drummond, 17, 35, 60-61
Lake Drummond and Orapeake Canal, see Cross Canal section
Lake Drummond Hotel, inside front cover, 50, 62
Lake Joyce Island's Canal, 119, 140
Laurel Ditch, 61
Lindsey Canal, 57
lock, on Jericho Canal, 34
lock opening times, 145
locks in the Dismal Swamp, map, 4-5
logging in the swamp, 42-43
London Bridge Creek-West Neck Creek Canal, 5, 140-143;
see also West Neck Creek
Long Creek-Broad Bay Canal, 5, 140-141
Long Point Lighthouse, 109
lotteries, 74
Lumber Ditch, see Fivemile Ditch
Lynn Ditch, 20, 22
Lynnhaven Bay's canal, 5, 140-141
Mackay Island National Wildlife Refuge, 108
Mahone, Gen. William, see Norfolk and Petersburg Railroad
Martha Washington Ditch, North 57, South 62
Merchant's Millpond State Park, 17, 39, 124
Middle Ditch, 22
Mill Dam Creek, mill on, 54
Millville, mill?, 54

mills, 17, 19, 22-24, 39, 54, 57, 65, 103, 124;
see also South Mills
Moccasin Track, see Turner's Cut
money, Dismal Swamp Canal on, inside front cover
Moyock Creek & Moyock, 124, 129
Munden Point Branch, see Norfolk, VA Beach & Southern
Munden Point Docks & Park, 99, 107-108, 123
Museum of the Albemarle, see Elizabeth City
Myrtle Ditch, 61
mysterious round island, 62
New Lebanon, see South Mills
Nike Missile sites, 57
Norfleet's Mill, Kincken, see Merchant's Millpond
Norfleet's Mill, the Widow, see Powell's Mill
Norfolk, Virginia Beach & Southern Railroad, 45, 107, 136
Norfolk & Carolina RR, see Suffolk Lumber
Norfolk & Portsmouth Belt Line RR, 103
Norfolk and Petersburg Railroad, 18-19, 44
Norfolk and Princess Anne Canal, see Gordon's Canal
Norfolk Circle, cruising the, 51, 98-99
Norfolk Southern RR, see Elizabeth City & Norfolk, etc.
North Carolina Cut, see Albemarle & Chesapeake Canal
North Landing River, 99, 105-109
North Landing River Natural Area Preserve, 106-107, 123
North Landing Scenic River System, 6, 105
North River, 99, 110-112
North West Canal, 5, 50, 52, 126-127; history of, 130-135;
Outfall Locks, 132-133; Pickle Barrel Boat,
134-135; see also Wallaceton
North West Landing, 128
North West Lock, 58, 84
North West River, 99, 108, 121, 126-129
Northeast Ditch, 57
Northwest River Park & Canal, 129
Old Brick House, Elizabeth City, 52, 68
Old Lebanon, see Horseshoe
Orapeake, 24
Orapeake Canal, see Cross Canal
Orapeake Mill, see Jones Millpond
Pasquotank River, 27, 52, 64-71, 124
Paw-paw Ditch, 61
Persimmon Ditch, 61-62
Pickle Barrel Boat on NW River, 134-135
Pocaty Creek, 99, 106, 121
Portsmouth & Roanoke Rail Road, 18, 44
Portsmouth Ditch, 4, 16, 19, 54, 61, 73
Powell's Mill, 24
Princess Anne, 143
Pungo Ferry, 107
Raft Inspection Station at Coinjock, 111
Railroad Ditch, 17, 22, 45, 61
railroads, 18-20, 22, 24, 44-47, 57, 61-62, 68, 103-104,
107, 127-128, 136; see also Railroad Ditch,
Richmond Cedar Works, Moses White
Redwater Ditch, 27
references cited in the text, 147
refuges, 7
Revolutionary War, 102-103; Lost British Canal, 140-141
Richardson's Mills, 65
Richmond Cedar Works & RR, 45, 57, 62, 103, 127
Riddick Ditch, 32, 61
Riddick's Mill, 22
Road, Nine-Foot Brick, 65; floating road, 68
Roanoke River, see Cross Canal section
Roasted Ditch, 64, 66
Rosemary Ditch, 57
Rotthery's Mill, 57
Ruffin, Edmund, 58
shingle camps, see logging
Shingle Creek, see Jericho Ditch
Smith Creek, 129
sources cited in the text, 147
South Mills & Lock, 50, 52, 64, 66, 84
Southampton Agriculture & Forestry Museum, 7, 47
Spence's Lock, 64
Starvation Farm, 106
state line & Wm Byrd, 17, 23, 25-26, 48, 50, 52, 62, 72,
99, 108, 128-129
stone, for locks, 75
Suffolk & Carolina Railway, 44
Suffolk Lumber Rail Road, 44
Suffolk Scarp, 20, 25
Superintendent's House, see Wallaceton
Sycamore Ditch, 62
Tazewell Lock, 58, 126; see also Wallaceton
temporary lock, 63
tides, 145
topo map index & ordering, 144
tracking boats, 43; see also Jericho
trails, 6
Tributary Ditch, 20
Tumbling Dam, see Gilmerton Cut
Turner's Cut, 4, 52, 64-65, 78
Union Camp Corporation, 4, 14, 20, 22, 44, 47
Virginia Beach Scenic Waterway,
see London Bridge & West Neck creeks
Virginia Beach Waterways, 122-123
Virginia Canals & Navigations Society publications, 151
Virginia Cut, see Albemarle & Chesapeake Canal
Wallaceton, 50, 52, 58-59, 84, 126; Wallace graveyard, 55
Washington, George, 24, 33, 60-62, 72-73
Washington Ditch, 4, 17, 22, 33, 61
water, swamp: WATER WITCH, 78
Waterside, Norfolk, 52-53
West Ditch in swamp, 22; at West Landing, 58
West Neck Creek, 99, 106, 123, 142-143;
see also London Bridge Creek
Weston, Cary, mill 54
Weyerhaeuser Ditch & RR, 26, 45
White, Moses & RR, 17, 25, 27, 32, 45, 47, 50
White Oak Spring Marsh, see Cross Canal
Wilkins Lock, 57
Williamson Ditch, 18, 20



THE GREAT DISMAL SWAMP COALITION

is the grass-roots organization which supports the Great Dismal Swamp National Wildlife Refuge. Membership includes a subscription to the newsletter and the opportunity to work with others to preserve the uniqueness of the Great Dismal Swamp.

Annual dues are now $5 to the coalition at Suite #30, 4107 Portsmouth Blvd. #101, Chesapeake, VA 23321.

OTHER PUBLICATIONS FROM VC&NS

The overall guidebook to Virginia's historic canal resources is THE AMERICAN CANAL GUIDE, PART 5: VIRGINIA, MARYLAND AND DELAWARE, 32 pp., ill., published by the American Canal Society. Copies are $3 ppd., payable to ACS, from Keith Kroon, ACS Sales, 2240 Ridgeway Ave., Rochester, NY 14626. Ask for a list of other ACS publications. Annual membership in ACS is $15.

THE VIRGINIA CANALS & NAVIGATIONS SOCIETY has a series of more detailed historic atlases of Virginia's rivers and canals, designed for canoeists, historians and planners. Copies of the following are available at river festivals, or by mail from R.A. Davis, VC&NS Sales, Rt.2, Box 254, Lexington, VA 24450, (540) 463-6777, payable to "VC&NS". Add $2 for postage and handling for each book ordered. Prices and publications are subject to change; see our web page.

RIVER BOAT ECHOES: BATTEAUX IN VIRGINIA, 84 pp., the VC&NS batteau book edited by Minnie Lee McGehee, with illustrated articles from THE TILLER, $12.

THE JAMES RIVER BATTEAU FESTIVAL TRAIL, 50 pp., historic river and canal guide to the James from Lynchburg to Richmond: "The James River Batteau Festival Trail." $7.

GUIDE TO THE WORKS OF THE JAMES RIVER & KANAWHA COMPANY, 35 pp., automobile guide to the company's 400-mile canal and turnpike system from Richmond to the Ohio River. $5.

THE FALLS OF THE JAMES ATLAS, 68pp., illustrated, historic canal and river sites along the falls in Richmond, $8.

THE RIVANNA SCENIC RIVER ATLAS, 34 pp., historic sites on the Rivanna Navigation in Albemarle and Fluvanna counties, $5.

THE SLATE AND WILLIS'S RIVERS ATLAS, 52pp., historic sites on the Slate and Willis's rivers and Salle's Creek, $8.

THE MAURY RIVER ATLAS, 26 pp., historic sites on the North (now Maury) River Navigation in Rockbridge County, $5.

THE APPOMATTOX RIVER ATLAS, river and canal sites on the Appomattox, Deep and Flat creeks and the Buffalo, 49 pp., $8 from VC&NS or to "Petersburg Department of Tourism" from Centre Hill Mansion, Petersburg, VA 23803.

APPOMATTOX RIVER SEAY STORIES, reminiscences of Jim Seay, the last Appomattox River batteauman, 100 pp., paper. $12 plus postage from VC&NS or the Historic Petersburg Foundation, 532 Grove Ave., P.O. Box 691, Petersburg, VA 23804, (804) 732-2096.

FALLS OF THE APPOMATTOX ATLAS, 85 pp., illustrated, historic canal and river sites along the Appomattox State Scenic River. $15 plus postage from VC&NS or the Historic Petersburg Foundation.

THE GLORIOUS ADVENTURE, by G.L. English, the hilarious tale of a boating expedition down the Appomattox River in 1904, edited by Nancy Dunnavant, $3.

THE RAPPAHANNOCK SCENIC RIVER ATLAS, 31 pp., historic canal and river sites on the Rappahannock, Hazel and Rapidan, $5.

THE GOOSE CREEK SCENIC RIVER ATLAS, 18 pp., historic sites on Goose Creek and Little River Navigation in Loudoun County, $5.

THE SHENANDOAH RIVER ATLAS, 109pp., historic sites on the Shenandoah, its forks, and the North River, $15.

Other VC&NS publications include THE PATOWMACK CANAL, by Alexander Brown, 16 pp., $2, and THE AGED PILOT MAN, Mark Twain's famous canal poem, $1. Back issues of the society's illustrated quarterly magazine of canal history and activities, THE TILLER, are also available. Annual membership in VC&NS is $15.

In preparation are atlases for the UPPER JAMES and Jackson from Covington to Lynchburg; the HOLSTON, CLINCH AND POWELL RIVERS, and the ROANOKE, DAN AND STAUNTON. These will be announced in THE TILLER.

Proposed future VC&NS river atlases will cover the MATTAPONI, PAMUNKEY AND DRAGON SWAMP; the NEW RIVER; the CHICKAHOMINY; the NOTTOWAY AND BLACKWATER; and the POTOMAC RIVER system.

For the latest information on VC&NS and its publications cruise our home page,

http://www.rockbridge.net/canal

ISBN 1-888838-00-0

THE VIRGINIA CANALS AND NAVIGATIONS SOCIETY was formed in 1977 to preserve and enhance Virginia's rich inland waterways heritage in all its fascinating aspects. History, exploration, archaeology, modeling, local lore and legend, restoration, preservation, park and trail development - these are some of the many areas of interest our members pursue, to their own great satisfaction and frequently to the lasting benefit of their communities and state.

The society was organized in 1980 with a constitution, by-laws, and elected trustees and officers. In 1982 it was chartered by the state as a non-stock corporation and approved by the federal government as a non-profit organization eligible to receive tax-deductible grants, gifts, land rights and dues, and to utilize preferential postage rates. The Board of Trustees has fiduciary responsibilities for accessions other than dues. The staff of officers conducts operational affairs and produces the TILLER. Local chapters monitor canal and river navigation sites and cooperate locally to accomplish the society's objectives.

We salute and encourage the work of individuals, Scout troops, garden clubs, local communities and others active in the promotion, creation and maintenance of existing and future canal parks in the Virginias. The society is increasingly active as a focus for waterways interest, and as a collective voice of all those who are concerned about the future of this priceless part of our past.

Members of the society receive the illustrated quarterly THE TILLER and other items of special interest; the opportunity to enjoy the company of others at society and local chapter meetings and field trips; and the chance to work together toward making our world a better place in which to live.

Individual annual membership in the society is $15 to
Sue Hopper, Treasurer, 1229 Summerfield Drive, Herndon, VA 22070

BUILD YOUR OWN DISMAL SWAMP GONDOLA

underside of side bench

C C C C

underside of side bench

underside of center benches

C C C C

1 cut the outside solid lines

2 fold dashed lines

one foot

A A A A

B B

rib (frame)

floor

underside of end bench

B B

underside of end bench

B B

3 glue sides together A-A

4 fold up sides & ends & glue end tabs B-B

5 fold over end benches

7 make canopy arch and fold side benches under and glue C-C

A DISMAL SWAMP GONDOLA, FROM THE GREAT DISMAL ATLAS

8 attach canopy and benches to the hull with spots of glue

6 glue on the outsides of the ends

ends of boat

9 fold and glue poles r use shiskabob sticks

10 mount Porte Crayon and the polemen

FOR MORE ABOUT THIS GONDOLA SEE PAGE 36

1997 - Virginia Canals & Navigations Society